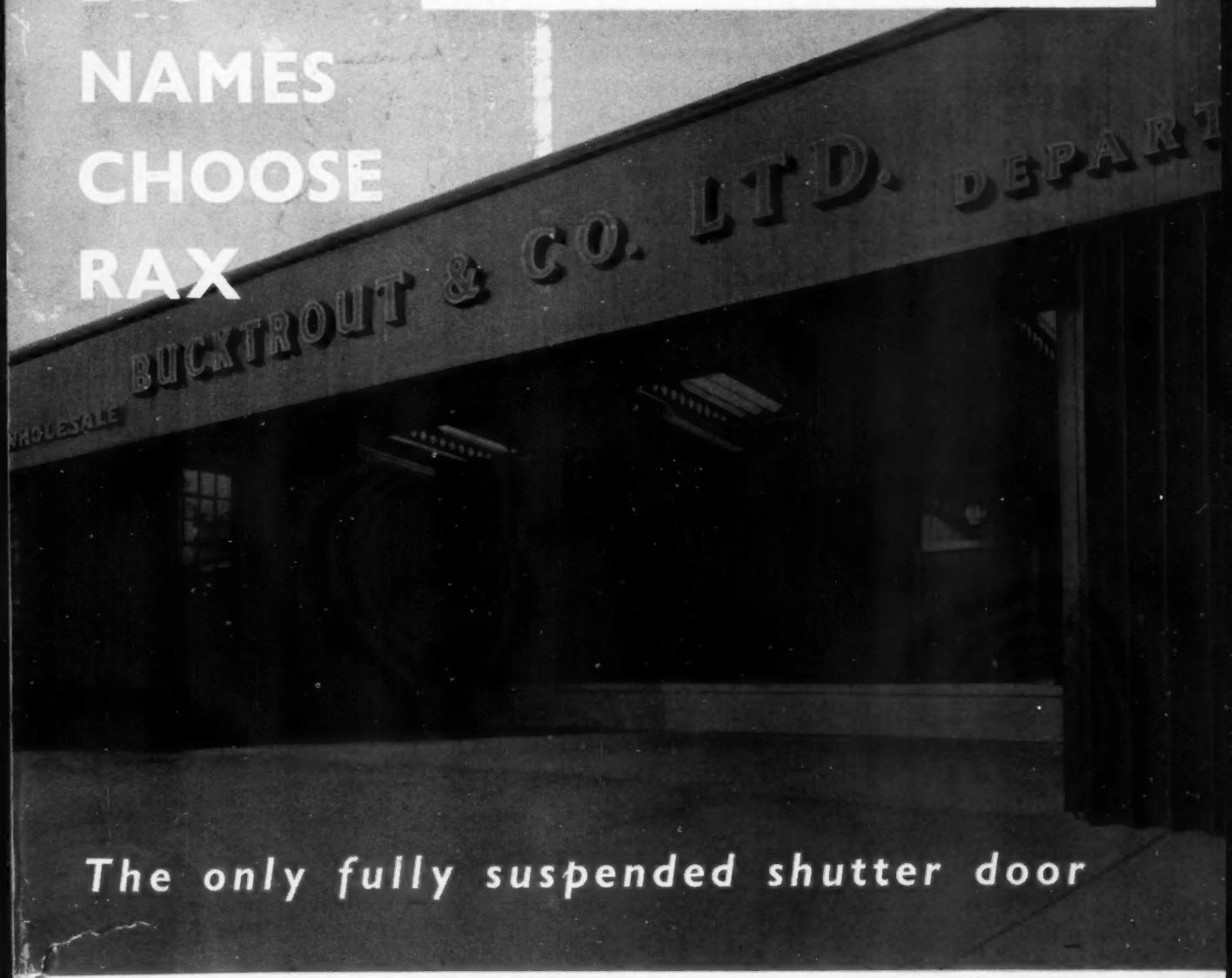
The Builder

A NEWSPAPER FOR THE ARCHITECT AND CONSTRUCTOR

NO. 6117 118TH YEAR. FRIDAY, AUGUST 12, 1960. Price 1/6.

THE BIG NAMES CHOOSE RAX



The only fully suspended shutter door

Photograph by courtesy of BUCKTROUT & CO. LIMITED, St. Peter Port, Guernsey.

Architect: Hugh C. Bouttell, A.R.I.C.S., Guernsey, C.I.

RAX

POTTER RAX LTD

Only RAX doors have all these exclusive features.

- Rustless steel dividing sections between leaves.
- Weight of leaves additionally supported at points shown. No dropping and consequent trouble through shutter leaves rubbing on threshold.
- Normal shutter door leaves supported at one point only.
- Special easy clean combined bottom guide and drain gulley.

Send for illustrated literature to Dept. 1.

LONDON Wilton Works, Shepperton Road, London, N.1. Telephone: CANonbury 6455 (4 lines) Telegrams: Encraxgat, Nordo, London

MANCHESTER New Union Street, Manchester 4. Telephone: COLlyhurst 2018.

BRANCHES AT **Belfast** **Dublin** **Newcastle-upon-Tyne** **Liverpool** **Bristol** **Plymouth** **Exeter** **Birmingham**

Things looked black at the factory . . .

. . . the cost of painting over bitumen was too high—said the works manager

you can paint bright gloss colour straight on to Bitumen with

EVOTECT

ANTI-BITUMINOUS PAINT

* Does not contain bitumen
  —bright colours retain gloss
* Good anti-corrosive paint on primed steel

A PRODUCT OF EVODE OF STAFFORD

EVOKOTE · EVODYNE · EVO-LED

* **SEND FOR LITERATURE** EVODE LTD., (PAINTS DIVISION) STAFFORD. Telephone: 2241 (5 lines)

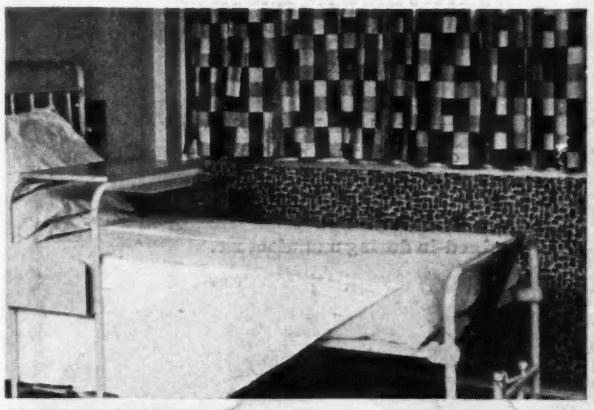
London Office: 82 VICTORIA STREET, S.W.1. Telephone: ABBey 4622 (3 lines)

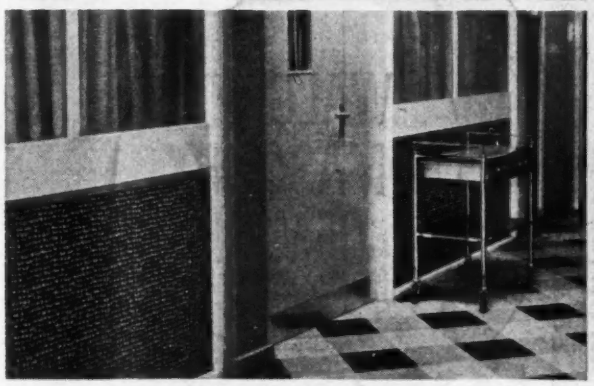
M-W.172

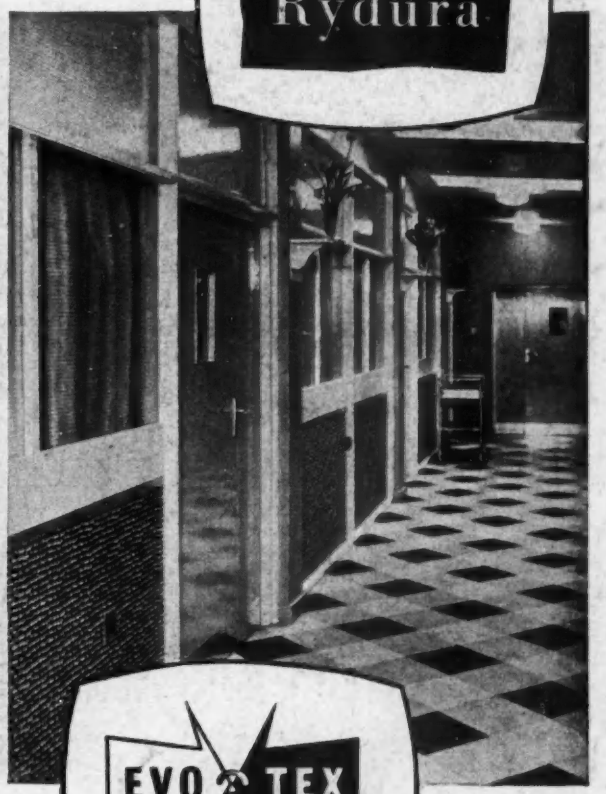
Two manufacturers create a scene

"... and faded chocolate and cream." How recently this described the general decor of maternity departments. Now, modern mothers demand and deserve a degree of maternal luxury. Here's how ... with low cost economy too.

Rydura







Actual photographs of a new Rydura-Evo-Tex installation in the new Maternity Extension of Walton Hospital, Liverpool. Details of other interesting co-operative installations are available.

EVO TEX

Keeping up with competitors in modern decorative materials is not enough ... the idea is to keep at least one step ahead—*and it should be a good long one.* Evo-Stik adhesives make giant steps easy. The highly efficient, speedy and economic installation of C.P.A. Rydura; most modern of materials—at Walton Hospital, was made using Evo-Tex S.L.820, special emulsion-based adhesive developed especially for use with decorative P.V.C's. Wherever industry has such applications, thoughtful manufacturing and processing groups put Evo-Stik on their shopping list. Where high efficiency adhesion is called for, Evo-Stik becomes a symbol of performance above and beyond the call of duty. *It pays us to keep ahead.*

Make a ward winning pair

Evo-Tex SL.820 has been specially manufactured in co-operation with the manufacturers of Rydura—Remember—SL.820 for Rydura.

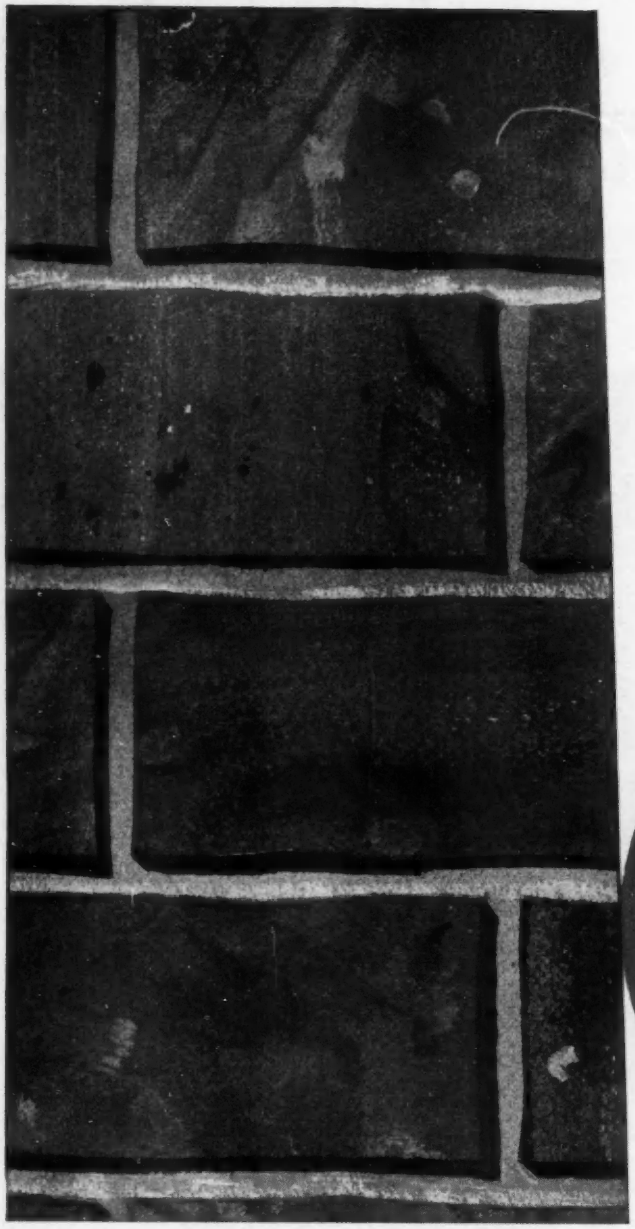
For new facts on the bonding of Rydura and other decorative materials, contact The Industrial Adhesives Division of Evode of Stafford.

EVO STIK

EVODE LIMITED (INDUSTRIAL ADHESIVES DIVISION) · COMMON ROAD · STAFFORD · STAFFORD 2241 (5 lines)

LONDON OFFICE: 82 VICTORIA STREET, S.W.1 · ABBEY 4622/3/4

A



Walcrete makes better mortar

Walcrete needs no additives

Walcrete produces a good bond

Walcrete spreads like butter

Walcrete has adequate strength for all mortar requirements

Walcrete is made under rigid laboratory control to Blue Circle standards. The materials used in its composition are accurately proportioned and intimately mixed-in during manufacture.

WALCRETE MASONRY CEMENT

WALCRETE

MASONRY CEMENT

COSTS LESS FOR BETTER MORTAR

A BLUE CIRCLE PRODUCT

Walcrete is one of the Blue Circle aids to better building

Write for further details to:

THE CEMENT MARKETING COMPANY, LTD · PORTLAND HOUSE, TOTHILL STREET, LONDON, SW1

G. & T. EARLE LTD, HULL · THE SOUTH WALES PORTLAND CEMENT & LIME CO LTD · PENARTH, GLAM.

An inexpensive and attractive alternative to Glazed Tiling

A glazed, easily cleaned wall surface is frequently required in canteens, schools, hospitals and many industries. Often, cost prohibits the use of glazed wall tiles and to this problem, TYLEX is the complete answer. TYLEX is applied like a paint, *with no joints to harbour dirt or bacteria* and is completely resistant to the effects of steam, grease, moisture and chemicals. It can be applied without preliminary sealing treatment to new or old wall surfaces and withstands frequent washing without losing its hard, brilliant glaze. The cost of TYLEX is comparable with that of a good quality paint. We shall be glad to send full details, together with a shade card showing the wide range of colours.

TRETOL LTD., THE HYDE, LONDON, N.W.9.
Telephone: Colindale 7223 (10 lines)

TYLEX

The Tile-Like Finish for Walls

TYLEX

For walls of hospital wards and corridors, sterilizing rooms, kitchens, lavatories, bakeries, brewhouses, food factories, indoor swimming-baths, laundries, etc.

MOST WORK-

LEAST COST!

A choice of bodies, with hydraulic or gravity tip, is available with or without driver's cab.

The latest Muir-Hill 3 cu. yd. machine results from nearly thirty years continuous production of dumpers. In consequence, the Muir-Hill 10B dumper is ahead in design, with lower operating costs, easier maintenance and easier control. Write now for latest leaflet.

Muir-Hill Regd.

BUILT BY BOYDELL

3 CU. YD. 10B DUMPER

A. BOYDELL & CO. LTD · STANFORD WORKS, 1 · OLD TRAFFORD · MANCHESTER · 16

FEBMIX ADMIX
AND
FEBMIX DEHYDRATED
are the largest selling
MORTAR PLASTICISERS
in the world!

Which means that our mortar plasticisers must be good

To those who prefer a liquid, we supply

FEBMIX ADMIX MORTAR PLASTICISER

But if a powder is preferred, we have available

Febmix DeHydrated Mortar Plasticiser

Both products are on a resin base and they have a similar action when incorporated in either bricklaying or plastering mortars.

From their use, material cost is reduced, labour output increased and the quality of the mortar is improved.

It costs you money NOT to use them!

FEB

(GREAT BRITAIN) LTD

102 Kensington High Street, London, W.8 WES 0444 ★ Albany Rd., Chorlton-cum-Hardy, Manchester 21 CHO 1063

DHB 8292

COMPREHENSIVE STOCKS OF

STEEL

READY FOR IMMEDIATE DELIVERY

COX AND DANKS LIMITED

SCRAP

DISPOSAL

BIRMINGHAM
Scapa Works
Langley Green
Oldbury, Birmingham
Tel: Broadwell 1611
Telex 33183

MANCHESTER
Frederick Road
Pendleton
Salford 6
Tel: Pendleton 2481
Telex 66448

SHEFFIELD
Stevenson Road
Attercliffe
Sheffield, 9
Tel: Sheffield 41216
Telex 54205

LONDON
Scapa House
Park Royal Road
London N.W.10
Tel: Elgar 5811
Telex 25239

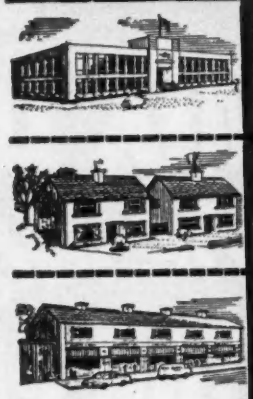
And at Newcastle, Bedford, Cardiff, Bow, Coventry and Belfast.

A METAL INDUSTRIES GROUP COMPANY

Paint and Protect all Metalwork with

IONOLAC

PROTECTIVE PAINTS & BITUMINOUS COVERINGS



Paints designed for outdoor application in Britain must be capable of withstanding exceptionally severe atmospheric conditions, including widespread pollution.
'Ionolac' laboratory-tested paints and bituminous coverings ensure positive protection per maximum surface area to all metalwork: up to 700 square feet per gallon for colours and blacks, and up to 1,100 square feet for aluminium. Suitable for brush application or with the addition of 5% of thinners, for spray work. 'Ionolac' is manufactured in a range of attractive shades to match contemporary colour schemes, or in universal black. Obtainable from stockists.
Write today for your 'Ionolac' leaflet.

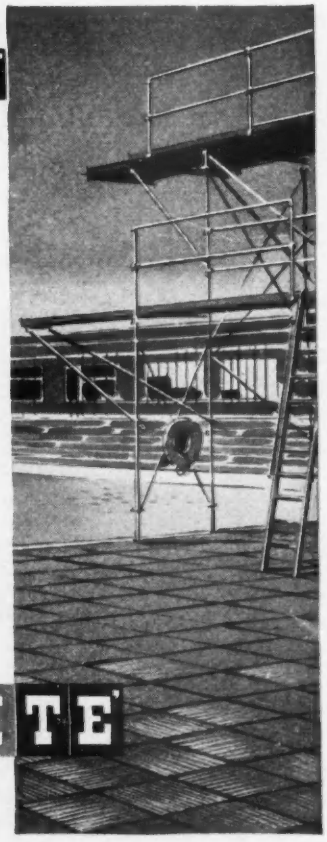
DUSSEK BROTHERS & CO., LTD.
THAMES ROAD, CRAYFORD, KENT.
Telephone: Crayford 22322

'NOELITE'

paves the way

Leading Architects and Builders have for over thirty years specified 'Noelite' as the ideal paving for the surrounds of all types of modern construction and also the renovation of old buildings. The pre-cast slabs are made in a variety of attractive colours and sizes and they are given a perfect non-slip surface by a unique process of manufacture.

See the 'Noelite' permanent display at the Building Centre 26 Store Street, W.C.1. or write for free leaflets to:



'NOELITE'

'NOELITE' LTD.
Contracts B Dept.
BOROUGH GREEN, KENT
Tel: Borough Green 2686

It's ten year tested it's FEBSILICON

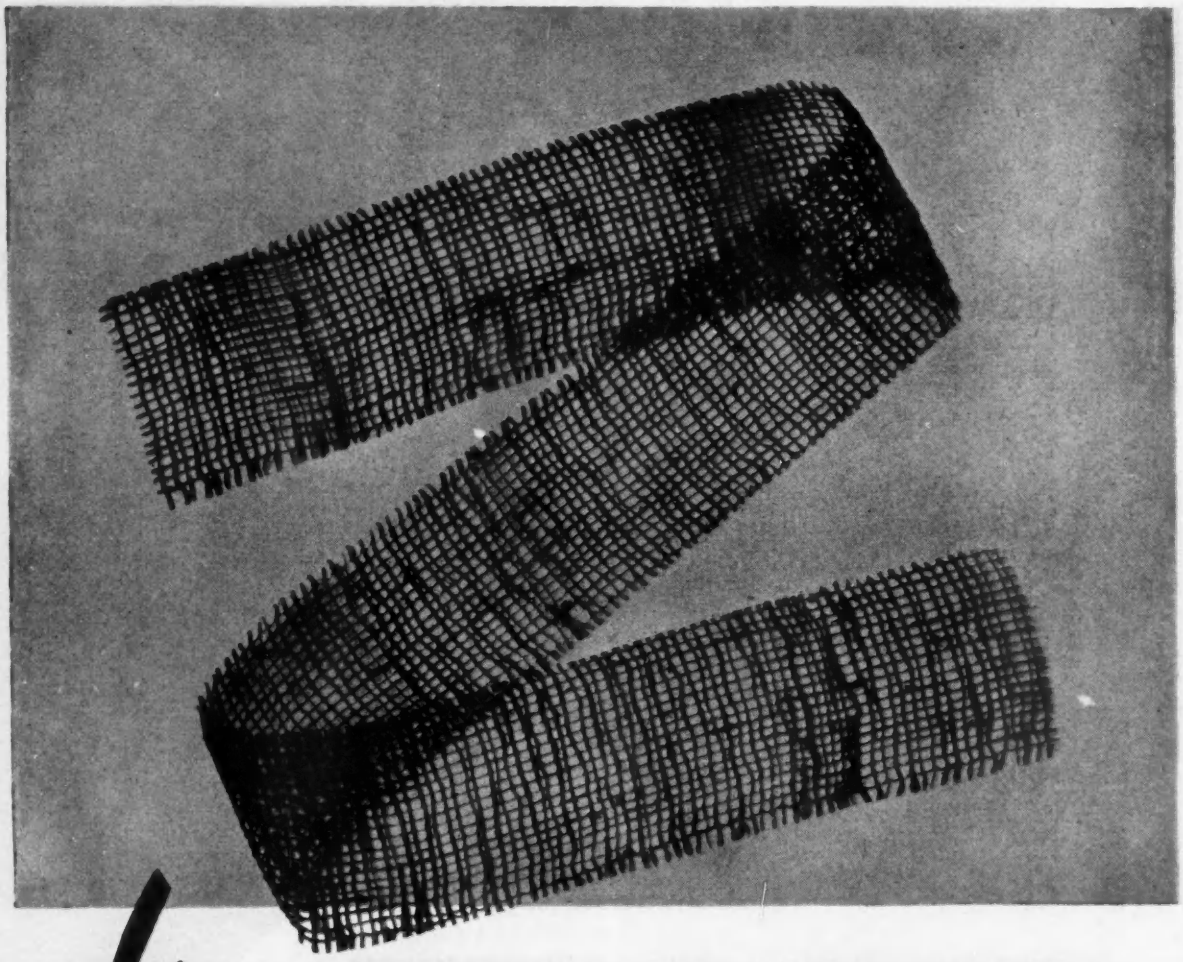
FEBSILICON
differs from the ordinary type of silicone waterproofers in that it contains a dispersing agent that by increasing the depth of penetration beneath the wall surface lengthens the waterproofing life of the treatment. For that reason a minimum lasting life of ten years can be expected from a one coat application of FEBSILICON Colourless Silicone Based Waterproofing Liquid. A brush or spray applied coat of FEBSILICON will prevent the penetration of rain and dampness through porous walls, and in the case of new stone work it acts as a preservative and protects the surface from atmospheric discoloration

FROM BUILDERS' MERCHANTS EVERYWHERE!

FEB (GREAT BRITAIN) LTD.

102 Kensington High Street, London, W.8
WES. 0444

Albany Road, Chorlton-cum-Hardy, Manchester, 21
CHO. 1063



for ZIM-SCRIM

the REGISTERED brand

ZIM-SCRIM meets the special requirements of the plasterer in modern building. ZIM-SCRIM, the registered brand of pure jute scrim, means a smoother, longer lasting job. *Smoother*—because its natural hairiness provides a firm, reliable basis for the plaster. *Longer lasting*—because ZIM-SCRIM is a natural fibre, exceptionally tough and durable, rot-proof under normal conditions.

ZIM-SCRIM is inspected constantly during manufacture to ensure maximum strength, regular weave, and accurate width. ZIM-SCRIM is your guarantee of the finest jute scrim available today.

For sample books, current price lists, and any other details about ZIM-SCRIM write to:

Zim-Scrim for building

JERRARD SONS & CO., LTD.

4 QUARRY ST., GUILDFORD, SURREY

Other distributors throughout Great Britain

Unique! Versatile! Economical!

that's

STRAMIT 'MOVAFLUSH'

...THE NEW EASY-TO-ERECT PARTITION

Just consider the outstanding advantages! Stramit 'Movaflush Partitions are erected speedily and easily. They have remarkable sound-deadening properties, and afford excellent thermal insulation, as well as a high degree of fire resistance. They also have an attractive flush finish (no unsightly cover-fillets) and offer an exceptionally good surface for decoration. What's more, Stramit 'Movaflush' Partitions are of completely dry construction and are available in a wide range of sizes. They're rigid, durable and de-mountable. And for all this, they're surprisingly low in price.

For full details fill in and post coupon NOW

Please send without obligation, full details of the new Stramit 'Movaflush' partition. B.B

COMPANY .....

ADDRESS .....

.....

For the attention of .....

STRAMIT BOARDS LTD., COWLEY PEACHEY, UXBRIDGE, MIDDLESEX. *West Drayton 3751 (10 lines)*

BOOTH Steelwork

now does the same

job better and costs less *

* by taking advantage of the new provisions of BS-449 (1959), worthwhile economies can be effected

Better build with Booth Steelwork and cut the cost of *your* structure.

JOHN BOOTH & SONS (BOLTON) LTD., HULTON STEELWORKS, BOLTON Telephone BOLTON 1195

London: 26 VICTORIA STREET, WESTMINSTER, S.W.1 Telephone ABBey 7162

PRIVATE RESIDENCE AT ANGMERING-ON-SEA

VELODEX P.V.A. EMULSION PAINT

Specially formulated for outdoor use, VELODEX gives far better results than dual-purpose emulsion paints. Low in price yet high in quality, VELODEX can be applied to all outside walls — whether brickwork, concrete, renderings or asbestos cement sheets — and it has exceptional adhesive properties over existing coats of oil paints. Simple to apply, quick-drying, durable, washable and unaffected by alkalis, VELODEX emulsion paint is the experts choice.

USE VELODEX and VELOID for maximum decorative effect at minimum COST

GEORGE LILLINGTON & CO. LTD

Willow Lane, Mitcham, Surrey Phone: Mitcham 1066
For Scotland: 42 High Street Greenock Phone: Greenock 20175

VELOID The outstanding P.V.A. emulsion paint for interior surfaces, is the perfect partner to Velodex. Offered at a price far lower than any comparable brand, VELOID is carefully formulated to give ease of brushing with widest coverage. Two coat work can be completed in one day.

[redacted]
38/3 per 1 gal. tin
36/- per gallon in 5 gal. pails
Write for colour card and booklet VE.1

[redacted]
32/6 per gallon in 1 gal. tins,
30/6 per gallon in 5 gal. pails.
Write for colour card and booklet PV.1

At last! IT'S HERE

The ALLEN 3/12

The trencher You've been waiting for

DIGGING

BACKFILLING

This versatile small trencher and backfiller will dig trenches 3" to 4" wide down to 5′ 6″ deep, or 12″ wide to 2′ 6″ deep, with a range of intermediate width and depth capacities. The digging boom is controlled hydraulically, and can be telescoped to suit the depth of trench. It is powered by a 12½ h.p. 4-stroke engine.

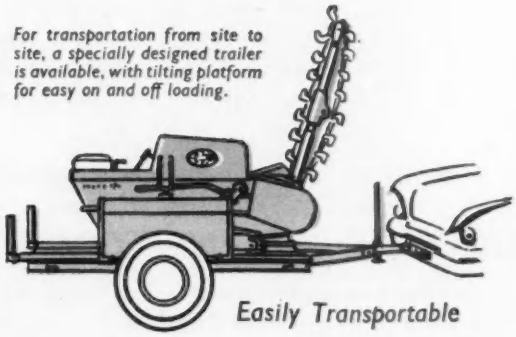
The **ALLEN 3/12** is ideal for builders, plumbers, public works contractors, telephone, water, gas and electrical undertakings, etc., and offers speedy, low-cost, mechanical trenching and backfilling for an almost endless variety of jobs.

The **ALLEN 3/12** is approximately 6′ 4″ long, 3′ 1″ wide, 3′ 1″ high and weighs 1,350 lbs.

Fill in and post the coupon below for full details of this superb machine.

ALLEN

For transportation from site to site, a specially designed trailer is available, with tilting platform for easy on and off loading.



Easily Transportable

To: **JOHN ALLEN & SONS (OXFORD) LTD**
COWLEY, OXFORD, ENGLAND

Please send full details of the ALLEN 3/12 Trencher.

Name .....

Address .....

S ..... Tel. .....

BURTON'S

PATENT
SOLID DROP-FORGED STEEL SCAFFOLDING FITTINGS

MANUFACTURED TO B.S.S. 1139-1951

Burton's Patent Double Coupler

Burton's Patent Putlog Coupler

Burton's Patent Split Joint Pin

Burton's Patent Swivel Coupler

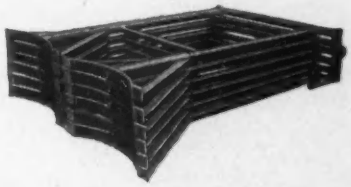
"QUIKLOCK" PAT. APP. FOR
ADJUSTABLE STEEL TRESTLES

1 Exceptionally strong Double Folding Trestle, suitable for Bricklayers, Plasterers, Decorators, Works Maintenance, etc. Simple to set up by one man, no erection problems

2 When Trestle is in use the feet lock at right angles, and for storage and transport can be folded locked at 180 degrees, in other words BURTON'S Trestles lock in every 90 degree position. Standard width take 4-9" Boards.

Supplied in four sizes—

Size	Height from floor to board level in 3 in. adjustment	Approx. wt. each in lbs.
1	1 ft. 9 in. Rising to 2 ft. 9 in.	41
2	2 ft. 9 in. ,, ,, 4 ft. 6 in.	54
3	4 ft. 6 in. ,, ,, 6 ft. 3 in.	70
4	6 ft. 3 in. ,, ,, 8 ft. 0 in.	100



Folded for Storage and Transport

LONDON & MIDLAND STEEL SCAFFOLDING CO. LTD

ST. LUKE'S WORKS, OLD HILL, STAFFORDSHIRE

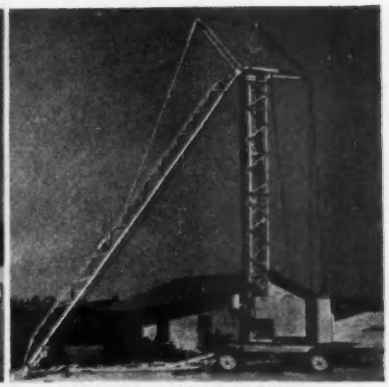
Telephone: CRADLEY HEATH 69181-5 Telegrams. DUBELGRIP, CRADLEY HEATH

London Offices: 6 LYGON PLACE, LONDON, S.W.1

Telephone: SLOANE 7291-3
Telegrams: DUBELGRIP, SOWEST, LONDON

Arrival on site . . .

"Mast & Jib" unit is raised . . .



reaches a vertical position . . .

SLASH YOUR BUILDING COSTS . . . with the AMAZING 205T "RECORD" TOWER CRANE

JUST LOOK AT THESE STAR FEATURES

- ★ LOW COST
- ★ FULLY MOBILE
- ★ SELF ERECTING (up in 10 mins.)
- ★ REMOTE CONTROLLED
- ★ THREE SAFETY DEVICES
- ★ IMMEDIATE DELIVERY
- ★ FULL STOCK OF SPARES

MAX. S.W.L. (UP TO 27 FEET RADIUS) 10 CWT.		
S.W.L. AT MAXIMUM RADIUS (34 FEET) 8 CWT.		
HEIGHT UNDER HOOK	SADDLE JIB	41 FEET
" " "	RAISED 45°	59 FEET
" " "	RAISED 60°	66 FEET
HOISTING SPEED		100 FEET/MIN
TRAVERSING SPEED		82 FEET/MIN
SLEWING SPEED		1 REV. PER MIN.

YOU CANNOT AFFORD TO BE WITHOUT ONE

CRANES OF LARGER CAPACITY ALSO AVAILABLE

For further details Telephone ELGar 1441 or write to MAIN U.K. DISTRIBUTORS

DELTA (PLANT) LTD. 10, CORONATION ROAD, PARK ROYAL · LONDON · N·W·10.

the inner mast begins to telescope . . .

the jib swings out . . .

and your 205 is now ready for work!

RECORD TOWER CRANES

THE CRANES 10 YEARS AHEAD . . . F. POTAIN & CO. (FRANCE)

for every lighting requirement

101 range fluorescent lighting fittings

The G.E.C. 101 range of fluorescent fittings offers a wide choice of designs for every lighting requirement. Employing the G.E.C. basic channel with its advantages of versatility and economy in installation and maintenance, they are used with 1½ to 8 ft. single or twin Osram guaranteed tubes.

G.E.C.
LIGHTING DIVISION

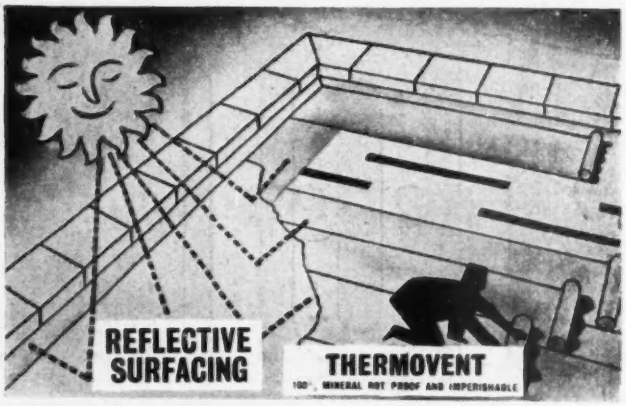
THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

The THERMOVENT system of roof ventilation . . .

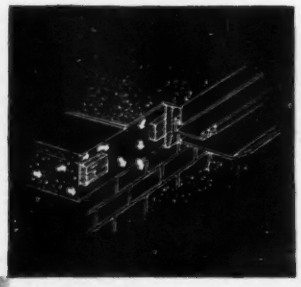
. . . a technique designed to protect the weather-proofing of flat roof structures against influences arising from:-

* **Moisture and air in insulation** * **Heat build-up on insulation**
* **Water in lightweight concrete** * **Roof movement**

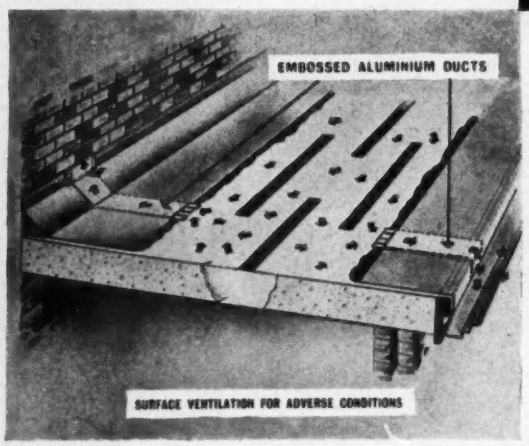
Thermovent is laid by the isolated system combining frame bonding and anchor strips to permit free vapour dispersal. The waterproofing is finished with a heavy stone surfacing to secure maximum reflectivity.



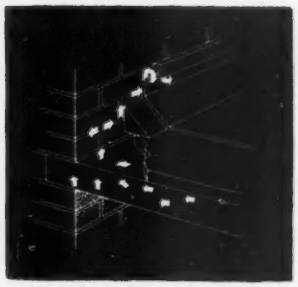
Where conditions are adverse surface ventilation is provided and metal ducts are fixed to relieve pressure to the outside air.



Drying in depth for extreme conditions is arranged at planning stage.



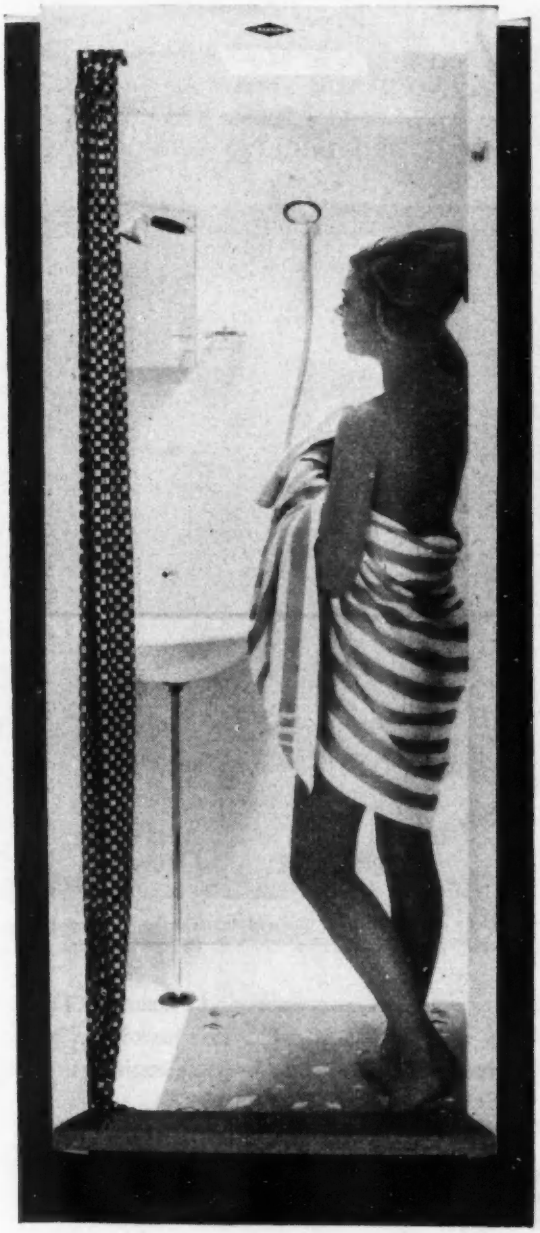
Typical detail is shown but others are available to suit design and advice will be given on request.



D. ANDERSON & SON LTD

STRETFORD, MANCHESTER Telephone: Longford 4444
OLD FORD, LONDON, E.3. Telephone: Amhurst 9381

from LEISURE a self-contained SHOWER CUBICLE



a space-saving **private** bathroom within the reach of all your clients!

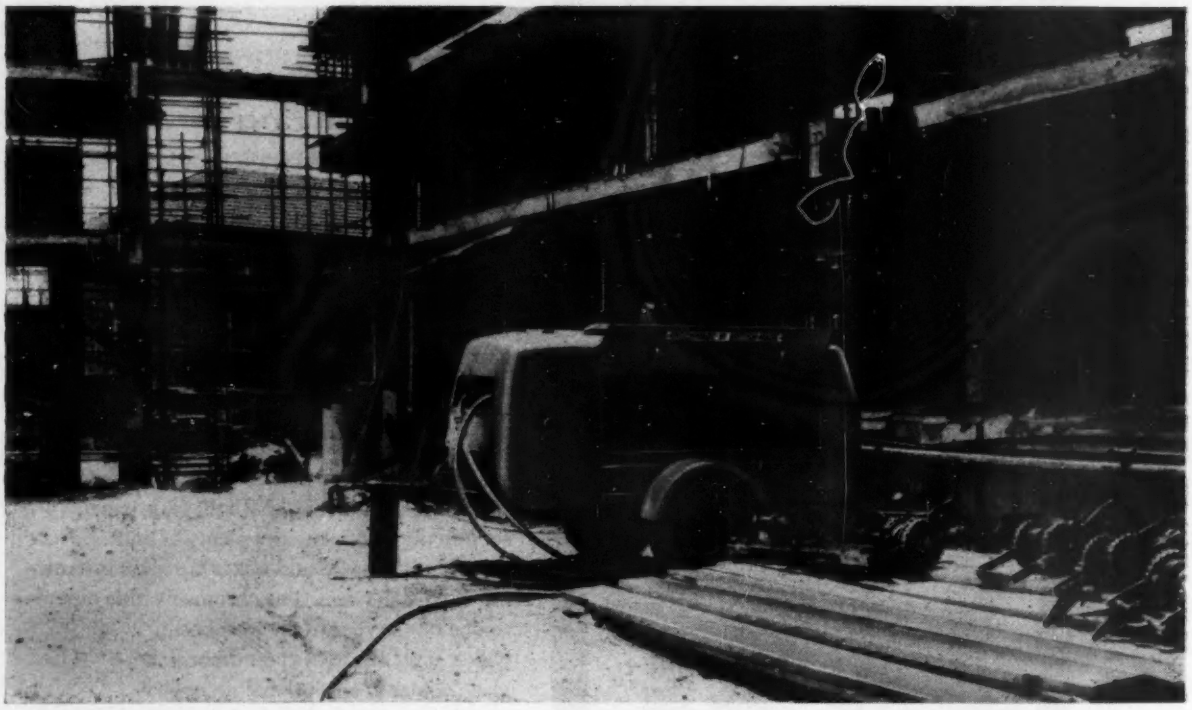
The Leisure Shower Cubicle has been designed to stand anywhere without structural alterations of any kind. It is particularly useful in flatlets, where space is so precious. What does the Leisure Shower Cubicle offer? An attractive shower curtain seals off the gleaming white and black enamel interior from the outside room. The spotlight glass panel, set into the roof, provides plenty of light. A twist of the anti-scald mixer tap gives instant hot or cold showers. The chrome flexible pipe can be transferred to the washbasin, which together with the mirror and glass holder is an optional accessory. The Leisure Shower Cubicle is soundly constructed in pressed steel, and is easy to install. Prices have been kept to a minimum so that all can benefit from this unique piece of home equipment.

PRICES FROM *£43.4.6 (undrilled)*
TO *£58.3.3 (complete with all accessories)*

THE LEISURE SHOWER CUBICLE IS MADE BY LEISURE KITCHEN EQUIPMENT LTD

NOTTINGHAM ROAD · LONG EATON · Nr NOTTINGHAM • *A DIVISION OF* **ALLIED IRONFOUNDERS**

Flats for the New South Wales Government Housing Commission are being rapidly erected. Projects of this size demand the most up-to-date methods and the most efficient plant. The contractors, Concrete Construction Pty. Limited, made sure of uninterrupted progress by using the latest " BROOMWADE " Rotary Air Compressors . . . world - famous for EFFICIENCY, RELIABILITY and ECONOMY.



A " BROOMWADE " Rotary Air Compressor working on the N.S.W. Government Housing Commission Flats. Photograph by courtesy of Messrs. Concrete Construction Pty. Limited.

" BROOMWADE " manufacture a wide range of Air Compressors and Pneumatic Tools covering the requirements of civil engineers and contractors. They are backed up by a world-wide network of works-trained representatives and qualified service engineers.

May we send you full details ?

"BROOMWADE"

AIR COMPRESSORS & PNEUMATIC TOOLS

Your Best Investment

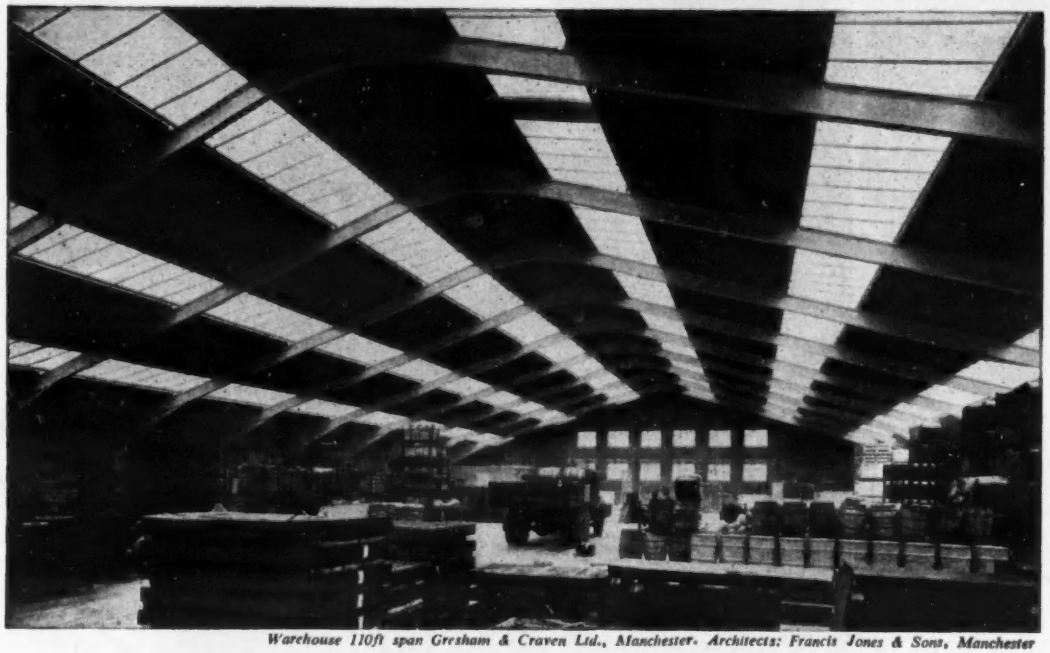
BROOM & WADE LTD., P.O. Box No. 7, HIGH WYCOMBE, BUCKS.

Telephone: High Wycombe 1630 (10 *lines*). *Telex:* 83-127.

783 SAS

Conder CLEARSPAN

SLASHES BUILDING COSTS—OUTDATES TRADITIONAL CONSTRUCTION



Warehouse 110ft span Gresham & Craven Ltd., Manchester. Architects: Francis Jones & Sons, Manchester

CLEARSPAN Buildings have established a brilliant new conception of Industrial Building Design.
Hitherto "Standard" type buildings have been largely confined to the "Shed" variety; and their use limited accordingly. Now CLEARSPAN brings all the great advantages of Standard Construction to a very wide range of Industrial Buildings. CLEARSPAN sets a new standard of design and efficiency.

*Spans 25ft. to 150 ft. *Cranes up to 50 tons.
*Roof slopes 6°-12°-17°-22°. *Virtually maintenance free.
(Variations to order.)

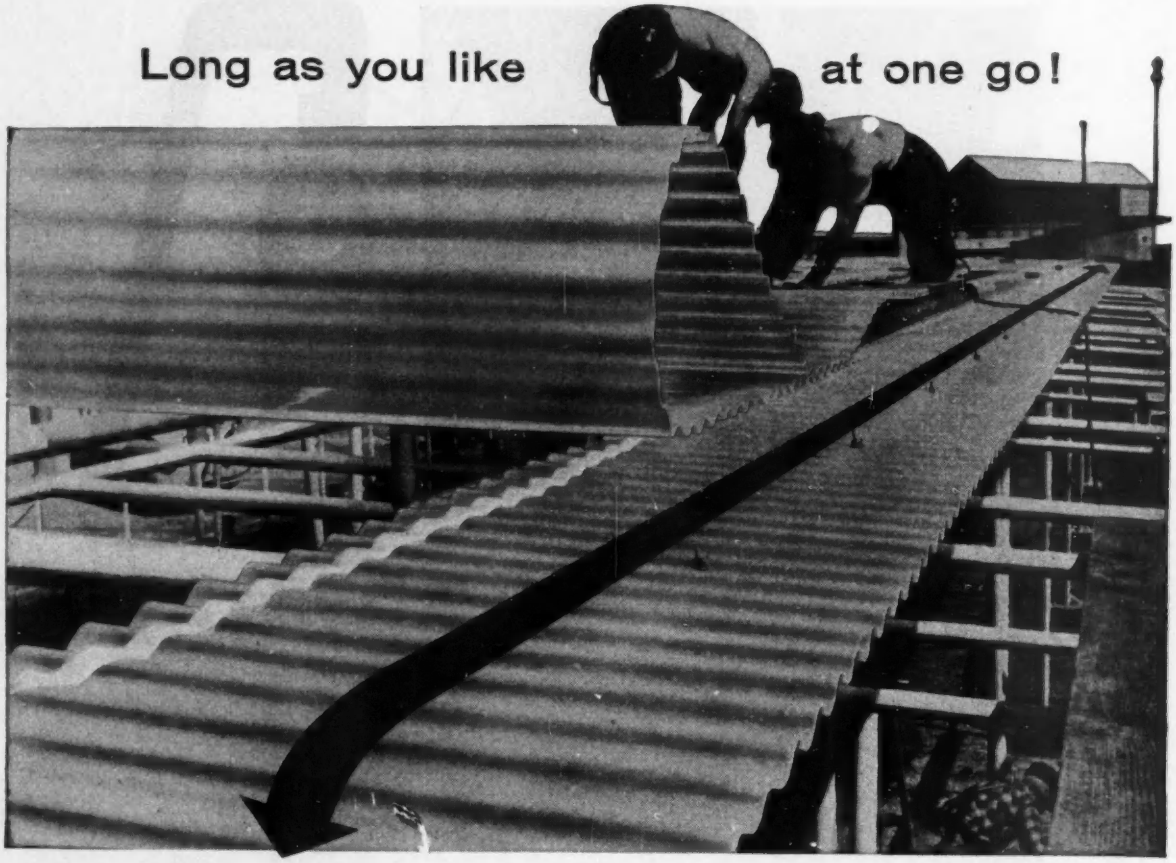
Brochure with 32 pages of facts, drawings and photographs sent on request.

CLEARSPAN *Buildings are used by many leading Industrial concerns including:*

Atomic Energy Commission.
British European Airways Ltd.
De Havilland Engine Co.
Esso Petroleum Co. Ltd.
Imperial Chemical Industries Ltd.
Imperial Tobacco Co. Ltd.
J. Lyons & Co. Ltd.
Ministry of Works.
National Coal Board.
Shell Mex & B.P. Ltd.
Southern Electricity Board.
George Wimpey & Co. Ltd.

CONDER ENGINEERING CO LTD WINNALL WINCHESTER HANTS TEL: 5095
CONDER ENGINEERING CO (MIDLANDS) LTD PEEL HOUSE BURTON-ON-TRENT TEL: 5411

Long as you like at one go!



ContiROL

translucent corrugated sheeting in continuous rolls

An entirely new departure—continuous corrugated translucent sheeting 6½ ft. wide and in 30-yard lengths, or longer—as long as you can handle. It saves work in fixing, needs less support and is stronger, weight for weight, than other materials.

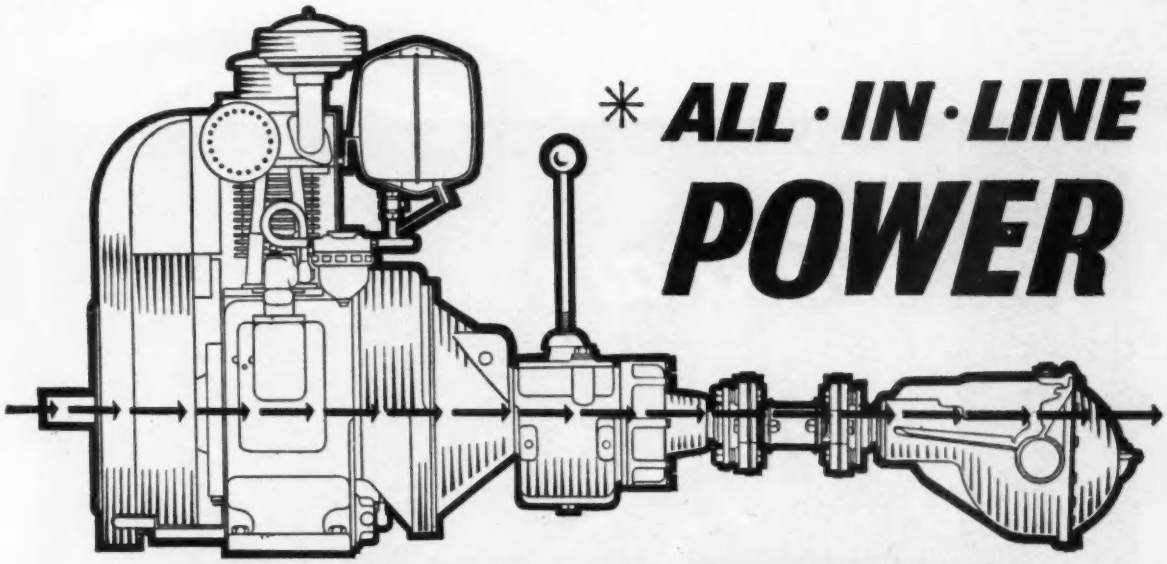
Contirol is made from polyester resin reinforced with glass fibre, strong, shatterproof, resistant to weathering—ideal for roof lights, canopies, walls and shelters.

Contirol is available in a wide range of attractive light-fast colours, translucent and opaque.

Write today for illustrated leaflet and full details of this translucent sheeting in brand new form to

JOSEPH WEIL and SON LIMITED

Friars House, 39-41 New Broad Street, London E.C.2. Phone: London Wall 5052



* ALL · IN · LINE POWER

NO BELTS, NO CHAINS, NO POWER LOSS WITH THE ALL·IN·LINE TRANSMISSION SYSTEM IN THE FABULOUS

LINER 'Roughrider' REGD.

BY APPOINTMENT TO HER MAJESTY THE QUEEN MANUFACTURERS OF CONCRETE BLOCK AND MIXING MACHINERY

15 or 22½ cwt. DIESEL DUMPER

*

The gearbox is capable of transmitting full engine torque in the indirect and reverse gears for very long periods and to withstand the heavy wear and tear of constant gear shifting under extremely arduous conditions.
All gears are in constant mesh, speed changes being effected by means of substantial multi-toothed dog clutches of gear tooth form which allow of quick and positive engagement of the required speed whether changing up or down.

MORE OUTSTANDING 'ROUGHRIDER' FEATURES:—

- *Propeller shaft does not need lubrication.*
- *P.R.M. constant mesh change-on-move gearbox with three forward and reverse speeds.*
- *Small turning circle makes it the ideal machine for narrow roads.*
- *All-in-line transmission without belts or chains.*
- *Height of the skip gives easy loading from mixer.*
- *Low centre of gravity enables the Roughrider to operate under extremely adverse conditions.*
- *Guards protect driver and working parts.*
- *Fully floating rear axle.*
- *Patented two-position skip.*

HIRE PURCHASE TERMS—ONLY 10% DEPOSIT

THE LINER CONCRETE MACHINERY CO. LTD.

74, PARK ROAD, GATESHEAD, 8. Phone: 72501. Grams: "Liner, Gateshead"

London Office & Showrooms: Liner House, Lexden Road, Acton, W.3. Phone: ACOrn 8931

Also at Birmingham, Manchester, Liverpool, Bristol, Leeds, Grantham, Accrington, Torquay, Glasgow, Dundee, Belfast, etc.

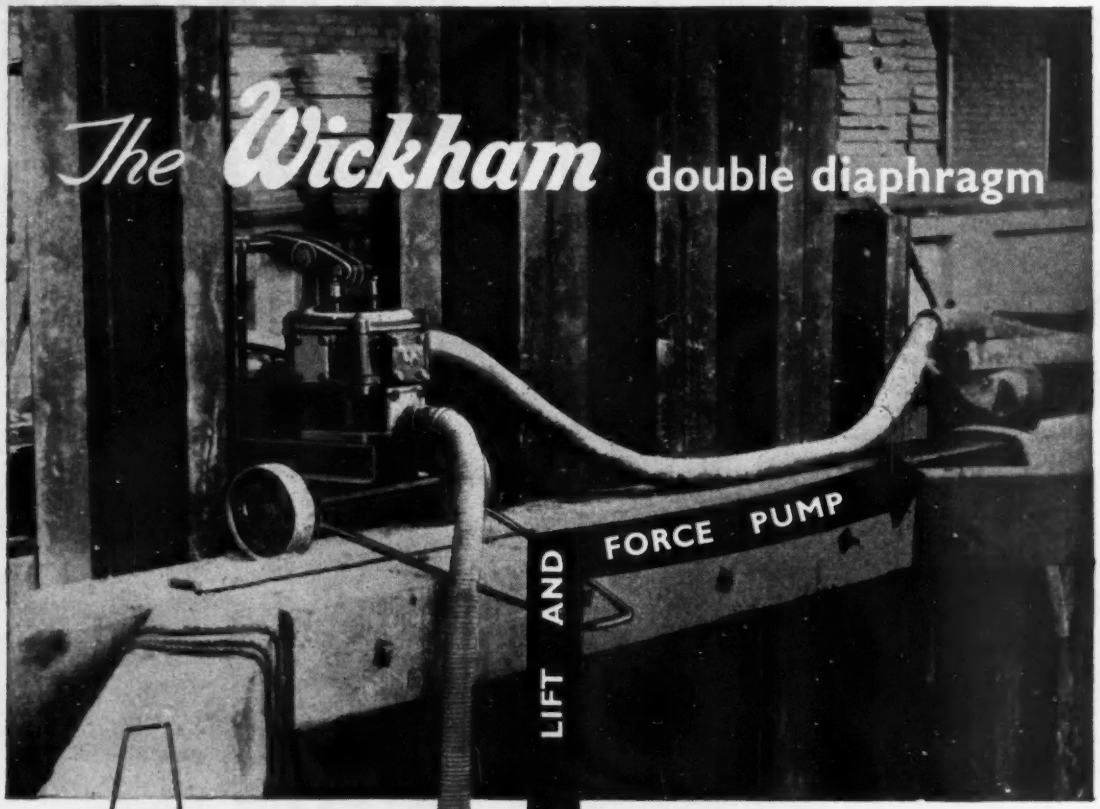
Please send full details of the Liner 'Roughrider'

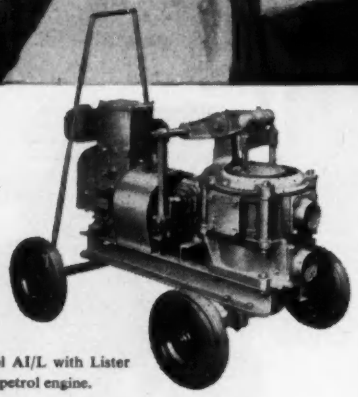
NAME .....

ADDRESS .....

.....

* (Post this coupon without delay!) 74





Model AI/L with Lister petrol engine.

Model'A2 with Lister LD Air-cooled diesel engine.

For over 10 years Wickham Double Diaphragm Lift and Force Pumps have been serving the contracting industry. This rugged sludge pump is today found in its thousands through the length and breadth of the U.K. Wherever contractors have a pumping problem involving abrasives, sludge and mud it is a Wickham Pump which is called for. Its simplicity, sturdiness and reliability has made it almost a legend in the industry.

With peak building construction in the coming summer months, you will need the service of the Wickham Diaphragm Pump to help you meet your time schedule. Write for full details *NOW*.

THE WICKHAM GEM 3" or 4" PUMP

PERFORMANCE

Max. suction lift: approx. 26 ft.
Max. delivery head: approx. 26 ft.
Max. output 3" approx. 5,000 g.p.h. 4" approx. 5,500 g.p.h.
Max. combined suction Lift & Delivery Head approx. 40 ft.
Fitted with either diesel or petrol engine or electric motor as required.

Wickham

WICKHAM ENGINEERING CO., LTD.

Dashwood House, 69 Old Broad St., London, E.C.2.

Telephone: London Wall 1191-2-3. Works: Ware, Hertfordshire.

TA2807

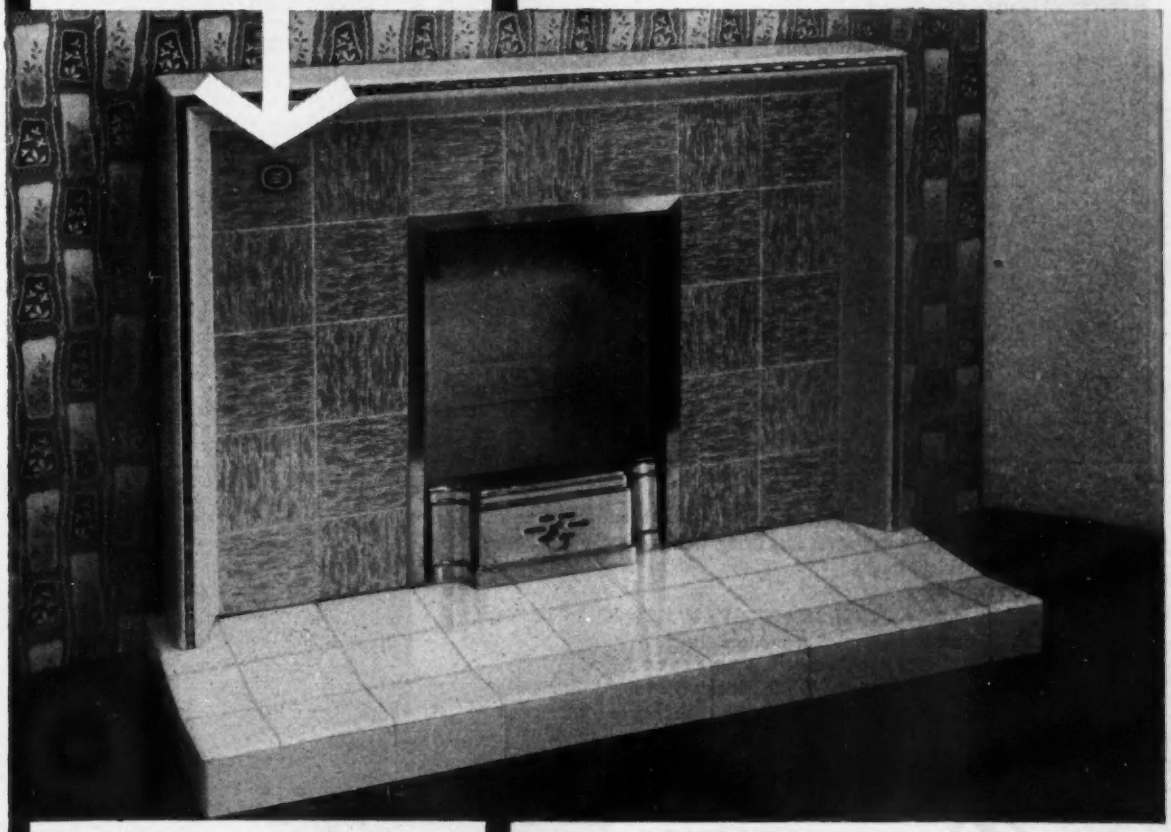
THIS SURROUND IS GUARANTEED SLABBED WITH CIMENT FONDU
THE IMMENSELY STRONG HEAT RESISTANT CEMENT

CIMENT FONDU
Regd Trade Mark
ALUMINOUS CEMENT

LOOK FOR THIS RED & GOLD SEAL

HIGH QUALITY SURROUNDS ARE SLABBED WITH

CIMENT FONDU



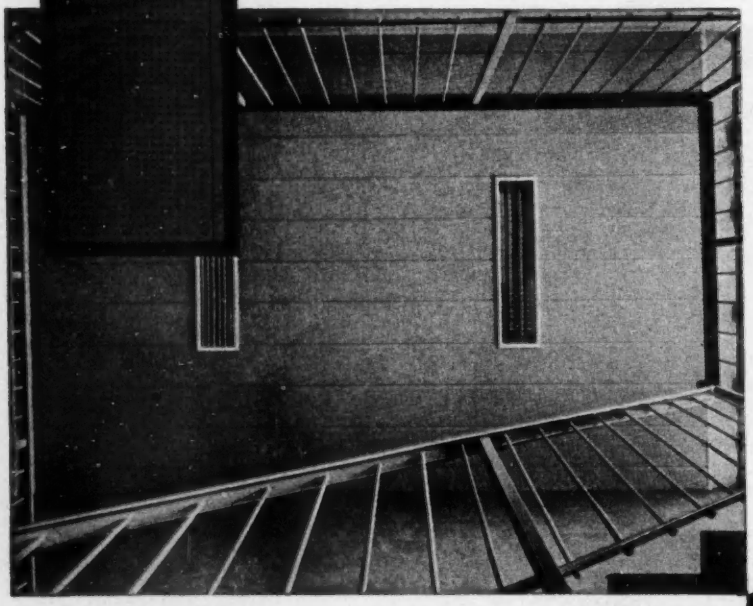
SEE THAT YOUR SURROUNDS
ARE SLABBED WITH CIMENT FONDU
HEAT-RESISTANT CEMENT

CIMENT FONDU
Regd Trade Mark
ALUMINOUS CEMENT

LAFARGE ALUMINOUS CEMENT CO LTD
73 Brook Street, London, W.1. Tel: MAYfair 8546

AP105

ANKARBOARD makes sound sense in busy buildings



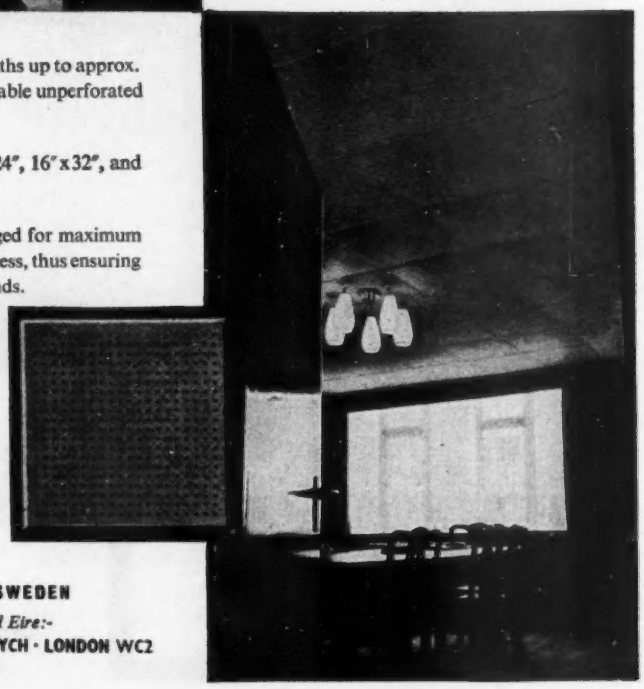
Ankarboard has been chosen by many leading companies because it eliminates noise-stress and improves working conditions. Ideal for board-room and stairway alike, it cuts extraneous noise to the minimum while providing limitless opportunity for pleasing decorative effects.

ANKARBOARD *can be supplied treated to Class 1 for spread of flame B.S.S. 476/53*

ACOUSTIC BOARDS
½″ or ¾″ thick, are available in 12″ or 16″ widths and in lengths up to approx. 18′. Grooved and ship-lapped for easy fixing. (Also available unperforated as insulation "longboards").

ACOUSTIC TILES
½″ or ¾″ thick in sizes 12″x12″, 16″x16″, 24″x24″, 12″x24″, 16″x32″, and 32″x32″. Tiles are bevelled on all four edges.

PERFORATIONS FOR BOARDS AND TILES
4 m.m. holes at 15 m.m. centres. Depth of holes is arranged for maximum acoustic effect while corner holes are bored to half thickness, thus ensuring good grip when tiles are screwed or nailed to fixing grounds. Random perforations also available.



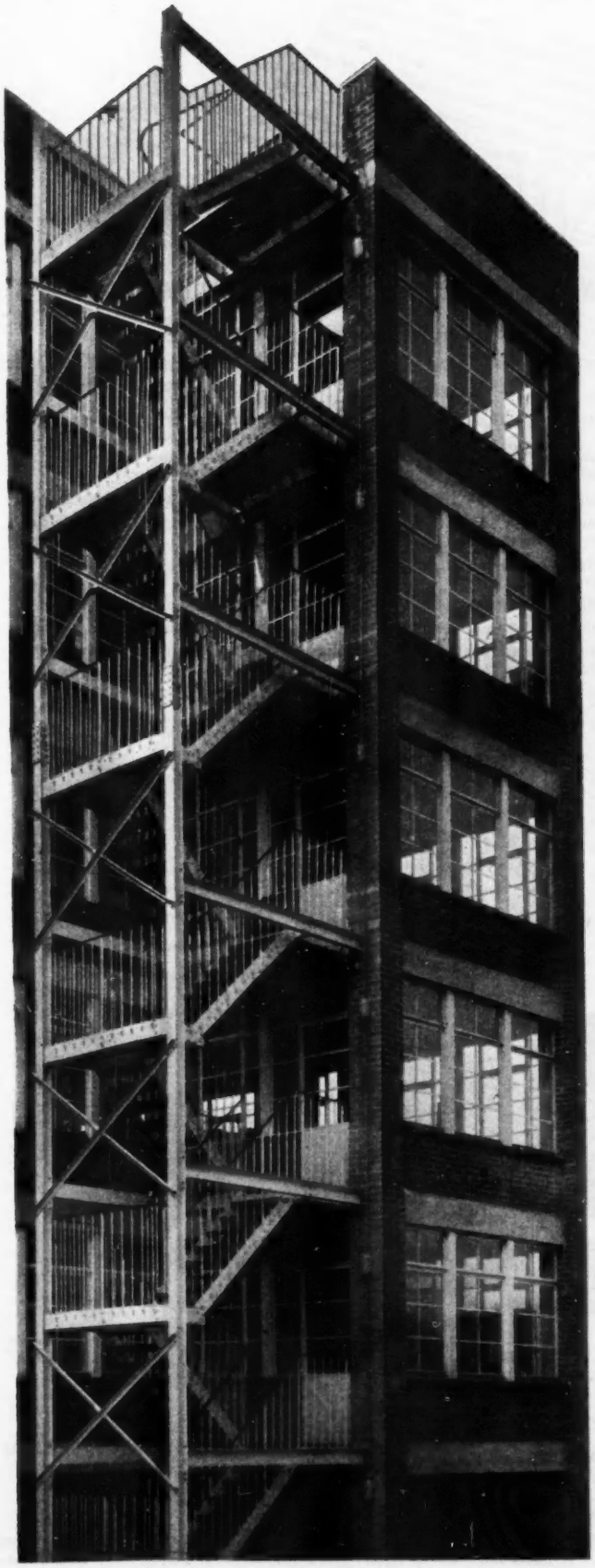
Ankarboard Acoustic Boards and Tiles fitted throughout the new offices of Thos. Parsons and Sons Ltd., Mitcham.

Architect: J.V Hamilton FRIBA. Staff Architect Messrs Clutton · London · SW1. General Contractor: F.G. Minter Ltd., London. Ceilings by: Insulatall Services Ltd., London WC2.

SCA
BOARD & PLYWOOD
SUNDSVALL-SWEDEN

Manufactured by
SVENSKA CELLULOSA AKTIEBOLAGET · SUNDSVALL · SWEDEN

For further particulars apply to the Sole Selling Agents for U.K. and Eire:-
MARTIN OLSSON (FIBREBOARDS) LTD. MELBOURNE HOUSE · ALDWYCH · LONDON WC2



Haywards metal staircases

Haywards Fire Escape Staircases were supplied and fixed on this new building for Longleys and Hoffman, Birmingham. Haywards staircases are constructed of suitable rolled steel sections with cast iron treads and landings of non-slip pattern to ensure minimum obstruction of light and adequate stability.

HAYWARDS HAVE SUPPLIED THE BUILDING TRADE FOR OVER 150 YEARS.

Architects: C. F. Lawley Harrod, F.I.A.A., A.M.I.Struct.E.

Contractors: Messrs. C. Green & Sons Ltd., Birmingham.

HAYWARDS LTD

HAYWARDS LIMITED
UNION STREET LONDON S.E.1
Telephone: Waterloo 6035 (Private Branch Exchange)
Grams: Haywards Bros. Sedist London

P5063

JOHNSON 'TRIP-SKIP'

MULTI-SKIP HANDLING WITH STANDARD JOHNSON DUMPERS

The " Trip-Skip " gives maximum flexibility to site organisation.
A simple sequence can be established whereby the dumper and crane work as a team —neither waiting for the other.
Both full or empty skips can be collected or deposited by the dumper.

- ★ When the mixer is sited outside the crane's radius, " Trip-Skip " maintains continuous concreting cycle.
- ★ The dumper is entirely independent of the crane—neither is waiting for the other.
- ★ Whilst one batch is placed by the crane, the dumper is hauling yet another filled skip from the mixer.
- ★ Four sizes available—30 cu. ft., 21 cu. ft., 16 cu. ft. and 12.5 cu. ft. (struck capacities).
- ★ Standard attachment for pouring narrow walls and columns without spillage.
- ★ " Trip-Skip " is interchangeable with normal tipping skip on all Johnson Dumpers.
- ★ The Johnson System enables a *filled* skip to be picked up by the dumper—usefu when muck-shifting from excavations, etc.
- ★ Have a demonstration on your job.

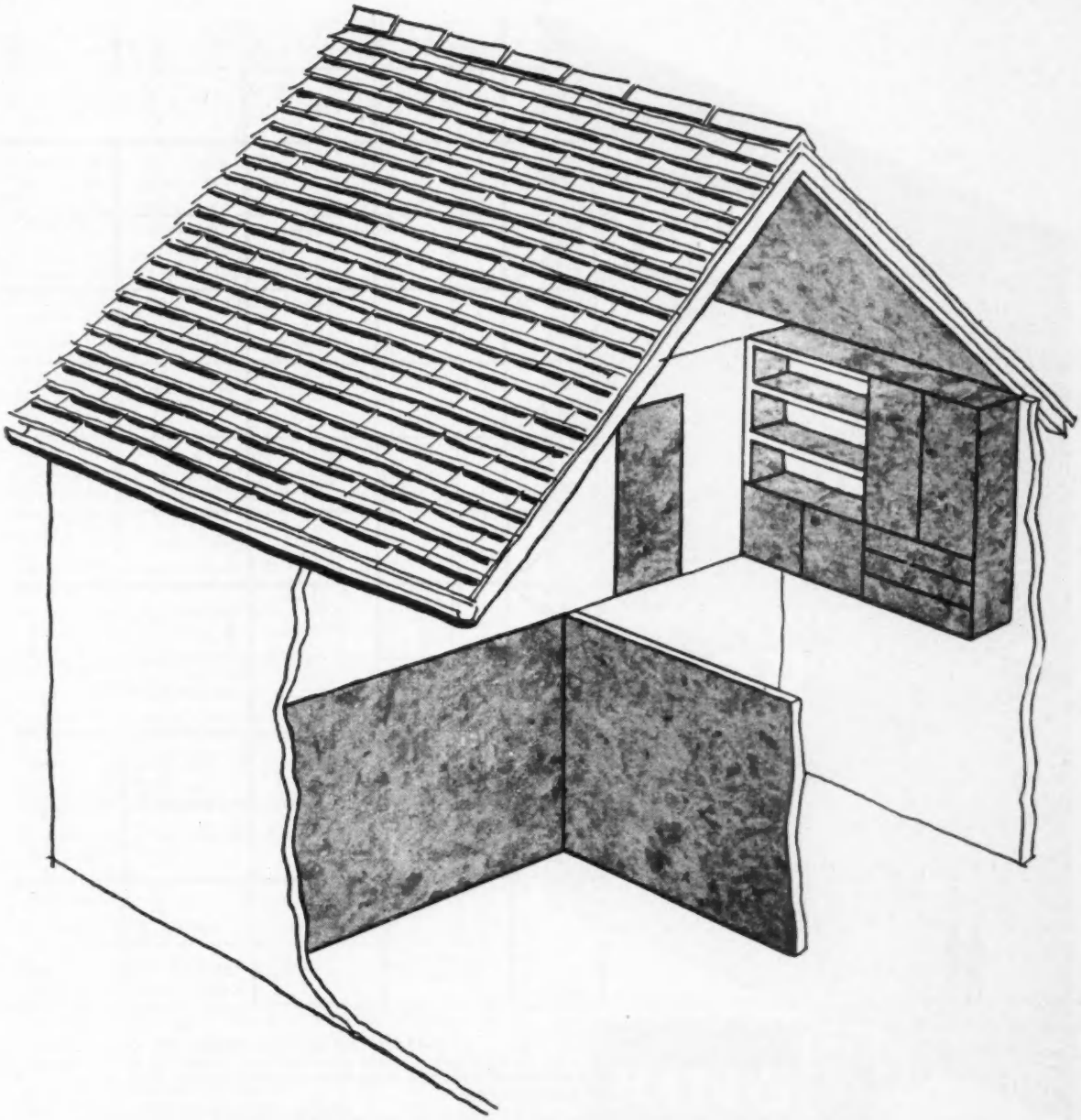
Filled skip is lodged in Ground Frame, ready for the crane. Dumper backs out, picks up an empty skip from a second ground frame and returns to mixer for another batch.

JOHNSON **QUALITY PAYS**

C. H. JOHNSON (Machinery) LIMITED STOCKPORT CHESHIRE
Telephone : STOckport 2642/5. Telex 66-297.
Telegrams : 'Machinery' Stockport.

FOR DUMPERS · MUD PUMPS · CENTRIFUGAL PUMPS · POWER RAMMERS · POKER VIBRATORS · SCREED VIBRATORS · FIXED AND MOBILE CONVEYORS

London Sales and Service Depot: 38/44 Lower Richmond Road, S. W.14. Tel: PROspect 7671 *Scottish Sales and Service Depot: 119, Whitefield Road, Govan, Glasgow, S.W.1. Tel: Govan 2701.*



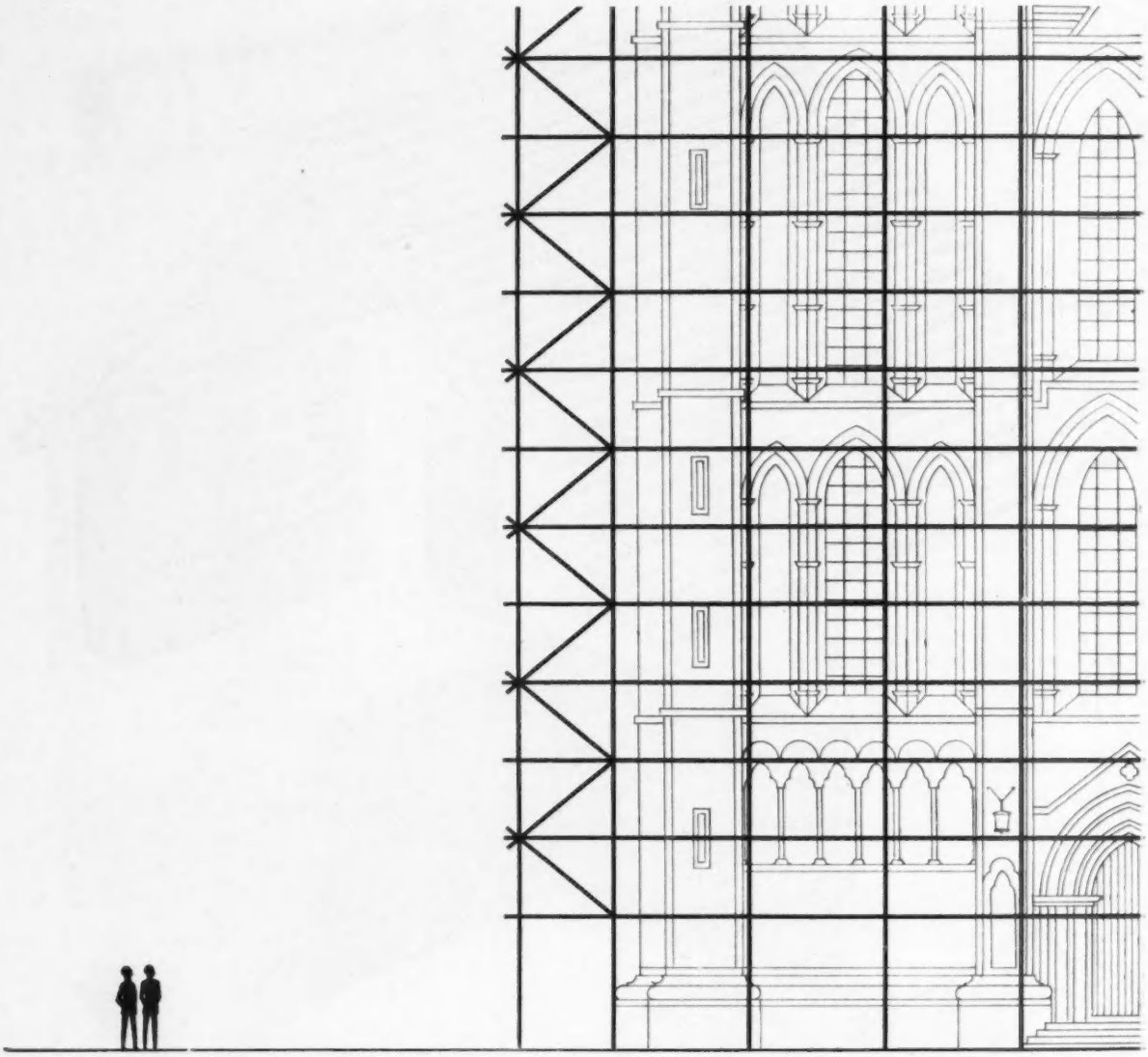
the board you can trust — to do so many jobs, so well

weyroc

one of the world's great man-made materials

THE AIRSCREW COMPANY & JICWOOD LTD
WEYBRIDGE · SURREY
TELEPHONE: WEYBRIDGE 2242/7

WPS 85



Face Lift

It's wonderful to see that magnificent old stonework coming out under the grime.

Yes, isn't it? And when they've finished cleaning they're going to treat the walls with I.C.I. Silicones to help keep the grime out and make them water-repellent.

Can silicones do that?

Yes — you simply brush or spray on a silicone solution, let it dry, and the job's done.

But won't silicones stain the stone?

No — that's one great advantage: silicones are colourless, and they give all-weather protection without changing the natural appearance of the stonework.

My house could do with silicones, then — but I don't much like the natural appearance of its stonework!

That's easy — paint it! If you're using emulsion paint, put silicones on first. If you use cement-based paint, use silicones as a top-coat.

What good will that do?

Silicones will improve the paint's resistance to rain, dirt and weathering.

I must try these silicones some time.

Well, why not *now?* Summer's the best time to get ready for winter.

ICI Silicones

The firms listed opposite supply treatments based on I.C.I. Silicones.

IMPERIAL CHEMICAL INDUSTRIES LTD., LONDON, S.W.1.

N.S. 86

The following water-repellents are based on I.C.I. silicones

'HYDRALEX' Associated Building Products Ltd., North Mills, Frog Island, Leicester.

'COLORSHIELD' No. 5 C. R. Averill Ltd., Alyn Mills, Caergwrle, Wrexham, Denbighshire.

'ANCOSIL' James Beard Ltd., 16 Great Ancoats Street, Manchester, 4.

'SILBEKONE' James A. Beck & Sons Ltd., Dalton Street, Belfast.

'AQUASEAL' No. 66 Berry Wiggins & Co. Ltd., Field House, Breams Buildings, Fetter Lane, London, E.C.4.

'PELMOIST' Cadulac Chemicals Ltd., The Bridge, Radcliffe, Lancs.

'ENPRUFE' Enfield Chemicals Ltd., Clayton-le-Moors, Nr. Accrington, Lancs.

'HYDROCIDE' SX Floorlife & Chemicals Ltd., The Hives, Mosley Road, Trafford Park, Manchester, 17.

'FULPRUFE' D. H. Fulton, 30 Templehill, Troon, Ayrshire.

'GEMSEAL' Joseph Gilman & Sons, Ltd., Stafford Street, Birmingham, 4.

'MOONRAKER' BRICKSTONE SEAL John Hall (Warminster) Ltd., Weymouth Street, Warminster, Wilts.

'PUDLO' Kerner-Greenwood Ltd., St. Anne's Street, King's Lynn, Norfolk.

'ROMANITE' W. R. Liverpool Borax Co. Ltd., Maxwell House, St. Paul's Square, Liverpool, 3.

'MAC' J. Manger & Sons Ltd., Crown Works, Stafford.

'RESILCO' Thomas Moscrop & Co. Ltd., 1 & 3 Folds Road, Bolton, Lancs.

'PALLASIL' Pallas Chemicals Ltd., 37 Lovaine Place, Newcastle-upon-Tyne.

'SETCRETE No. 19 Quickset Water Sealers Ltd., 20 Albert Embankment, London, S.E.11.

'WYKAMIT' Richardson & Starling Ltd., 21 Hyde Street, Winchester, Hants.

MASONRY WATER REPELLENT Smith & Walton Ltd., Haltwhistle, Northumberland.

'IMPERVION' Solignum Ltd., Dagenham Dock, Essex.

'STANDARD' SILICONE WATER REPELLENT Standard Paint & Varnish Co., 15 Redcross Way, London, S.E.1.

'DAMPOL' Stephenson & Co., Robins Lane, Carleton, Blackpool, Lancs.

'SZERELMEY' SILICONE LIQUID 103 Szerelmey Ltd., Rotherhithe New Road, London, S.E.16.

'ENDAMP' Torbay Paint Co. Ltd., New Road, Brixham, Devon.

'TRETOL' SILICONE WATER REPELLENT Tretol Ltd., The Hyde, London, N.W.9.

'KELPIE' SILICONE WATER REPELLENT John C. Walker & Co. Ltd., 71/77 Tobago Street, Glasgow, S.E.

'PENETREX' 53 F. A. Winterburn Ltd., Holborn Street, Woodhouse, Leeds, 6, Yorks.

ICI Silicones

Imperial Chemical Industries Ltd
London, S.W.1

NS.810

straight sliding
DOOR
gear . . .

folding
DOOR
gear . . .

around the corner
DOOR
gear . . .

power operated
DOOR
gear . . .

KING

REGISTERED TRADE MARK

make the lot. . . .

a lot better!

get in touch with

GEO. W. KING LIMITED

Argyle Works, (10/B) Stevenage, Herts. Telephone: 440.

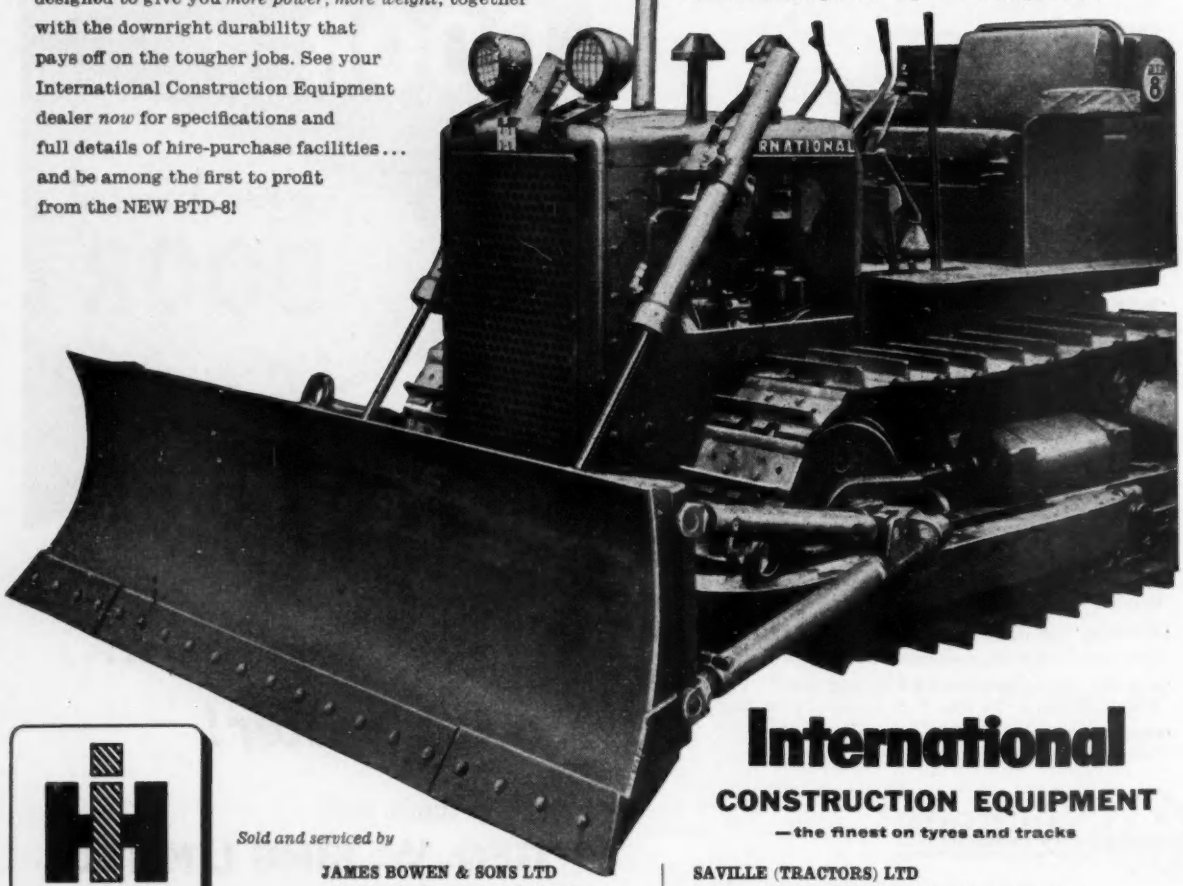
Newest in the International line—

NEW 60 h.p. BTD-8

(80 SERIES)

New power, new features—plus many work-proven International principles! The NEW BTD-8 is cleanly styled, easy to operate and backed by International's enviable reputation in the 'smaller' crawler field (over 10,000 British-built crawler tractors are in operation in over 50 countries). The NEW 60 h.p. BTD-8 is specifically designed to give you *more power*, *more weight*, together with the downright durability that pays off on the tougher jobs. See your International Construction Equipment dealer *now* for specifications and full details of hire-purchase facilities... and be among the first to profit from the NEW BTD-8!

- **NEW ENGINE.** Great lugging (225 lb. ft. torque) ability. Full-flow lubrication. 3-point fan drive.
- **NEW ALL-WEATHER DIRECT STARTING** at turn of key. Regular equipment. Economical 12-volt system.
- **NEW TRANSMISSION.** Extra mesh with 30° spiral bevel gears. Cushioned power flow with flexible coupling.
- **NEW STEERING STRENGTH.** Proved International single-coil multi-plate clutches with heat-resistant sintered metal friction facings.
- **NEW TRACK COMPONENTS THROUGHOUT,** plus exclusive International 3-point track suspension.
- **'CRUISER CABIN' COMFORT.** Flush deck. Adjustable seat. Contoured steering levers. Single centralised gear shift.



International

CONSTRUCTION EQUIPMENT

—the finest on tyres and tracks

INTERNATIONAL HARVESTER

Sold and serviced by

JAMES BOWEN & SONS LTD
Edinburgh, Glasgow and Aberdeen

R. CRIPPS & CO LTD
Nottingham, Manchester and Shildon

SAVILLE (TRACTORS) LTD
London, Stratford-on-Avon, Cardiff and Belfast

WESTERN CONTRACTORS SERVICES LTD
Bristol, Exeter and Salisbury

INTERNATIONAL HARVESTER COMPANY OF GREAT BRITAIN LIMITED · HARVESTER HOUSE · 259 CITY ROAD · LONDON EC1

Problem: HEAT

Solution: COLT Ventilation

Place: LEYLAND MOTORS LIMITED
LEYLAND LANCASHIRE

The Architects, Messrs. Harry S. Fairhurst & Son, F/A.R.I.B.A., who designed this factory for Leyland Motors Ltd. installed Colt Ventilators throughout for three reasons:

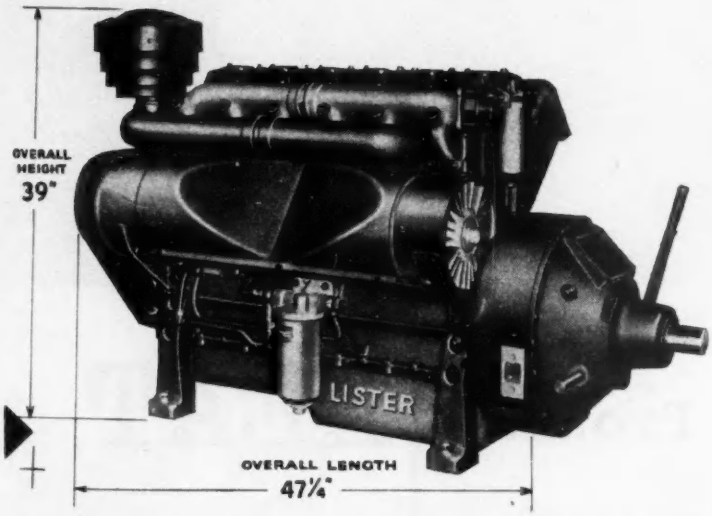
1. They had confidence in Colt Ventilation from past experience.
2. They liked the low silhouette which would not impair the appearance of the building.
3. The installation weighed 72 tons *less* than any other ventilation equipment available, thereby showing considerable saving in structural costs.

In providing a permanent solution to this ventilation problem Colt have added yet another chapter to their record of success—success which has brought repeat orders from many world-famous concerns. Send for a free Data Manual to Dept. M36

COLT VENTILATION LIMITED SURBITON SURREY TELEPHONE: ELMBRIDGE 0161

Latest additions to the LISTER range of air-cooled diesel engines

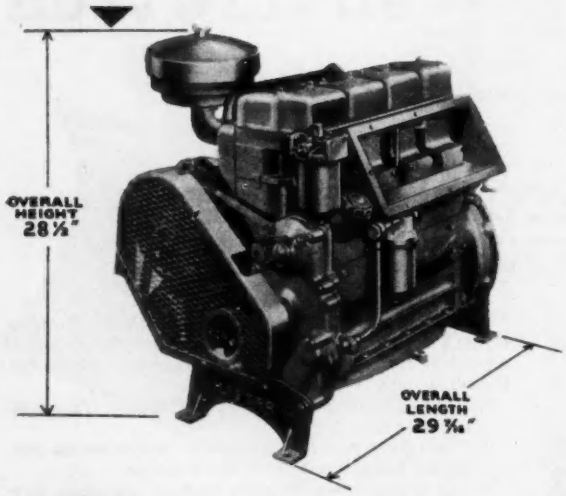
With continuous ratings up to 72 h.p., Lister air-cooled diesel engines now provide the power for an even greater variety of contractors' plant and equipment than before.



(Right) **The six-cylinder 'HA/HB6' fitted with clutch**

The extended range of Lister air-cooled diesel engines now includes the following:

(Below) **The four-cylinder 'SL4'**



ENGINE TYPE — HORSEPOWERS

Speed	750 r.p.m.	1000 r.p.m.	1500 r.p.m.	1800 r.p.m.	2000 r.p.m.
LD1	1.5	2.0	3.0	3.5	
LD2	3.0	4.0	6.0	7.0	
SL1		2.4	3.6	4.25	4.75
SL2		4.8	7.2	8.5	9.5
SL3		7.2	10.8	12.75	
SL4		9.6	14.4	17.0	19.0
HA2		12.0	19.0	22.0	
HA3		18.0	28.5	33.0	
HA6			57.0	66.0	
HB2					24.0
HB3					36.0
HB6					72.0
Speed	650 r.p.m.	850 r.p.m.			
VA	5.75	7.5			

A comprehensive range of accessories is available for all Lister air-cooled diesel engines.

Ask for full details of these and other Lister Blackstone engines up to 1500 h.p.

R. A. LISTER & CO. LTD., Dursley, Gloucestershire. Phone: 2371.

London Office: Imperial House, Kingsway, W.C.2. Phone: TEMple Bar 9681.

THERMALITE

the leading name in

loadbearing
insulating
building
blocks

THERMALITE YTONG LIMITED
HAMS HALL LEA MARSTON SUTTON COLDFIELD WARWICKSHIRE
TELEPHONE: COLESHILL 2081

SALFORD MUNICIPAL DEVELOPMENT

1,400,000 'Phorpres' common and facing bricks

Built for Salford Corporation by Direct Works Department, this recently completed scheme comprises 711 dwellings in nine 10-storey blocks, three 11-storey blocks, and a single smaller block of six shops with maisonettes above. The scheme was started eighteen months ago.

City Engineer—G. A. McWilliam, B.SC., A.M.I.C.E., A.R.I.C.S., M.I.MUN.E.,
Town Hall, Bexley Square, Salford 3,
Lancs.

Architects—Cruickshank & Seward, Chartered Architects,
196 Deansgate, Manchester 3.

Contractors—City of Salford Direct Works Dept.
General Manager:
Stephen W. Johnson, F.BLDG.S.I., M.I.MUN.E.M.,
Unwin Street, Cross Lane, Salford, Lancs.

MULTI-STOREY FLATS, LOWER KERSAL, SALFORD

LONDON BRICK COMPANY LIMITED—in the service of the building industry

WINGS DAY SEPT. 17th

GIVE FOR WINGS AND GAIN

Head Office: Albion House, Kingsway, London, W.C.2. Telephone: HOLborn 8321
Midland District Office: Prudential Buildings, St. Philip's Place, Birmingham 3. Telephone: Central 6[illegible]
South-Western District Office: 11 Orchard Street, Bristol 1. Telephone: Bristol 2[illegible]
Northern District Office: St. Paul's House, 20-22 St. Paul's Street, Leeds. Telephone: Leeds 3[illegible]

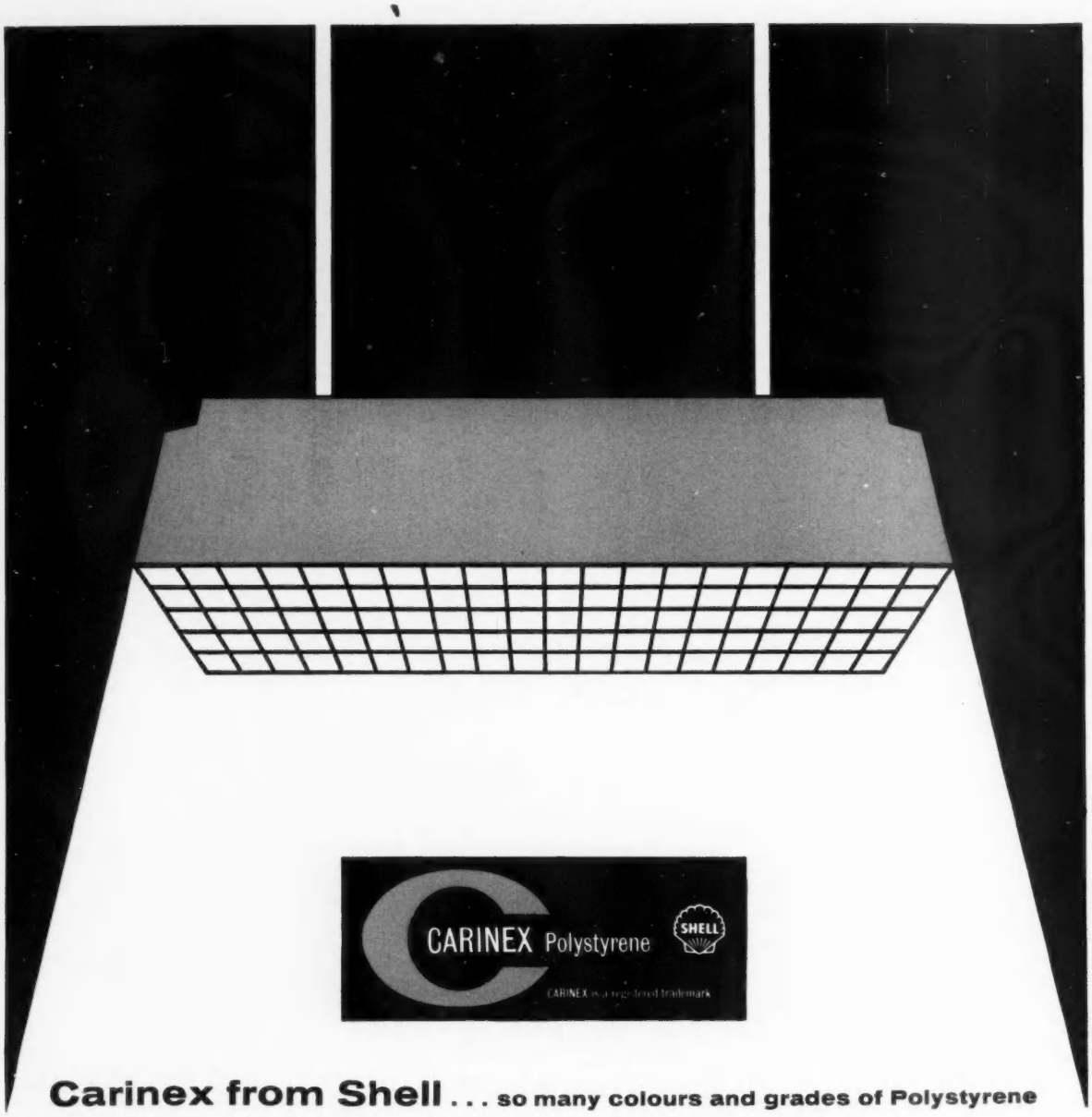
BY APPOINTMENT TO HER MAJESTY QUEEN ELIZABETH II BRICK MAKERS

HIGGS AND HILL

LIMITED

LONDON

LEEDS COVENTRY



Carinex from Shell . . . so many colours and grades of Polystyrene

The Shell range of Carinex polystyrene offers you colours in the widest variety. These include such special effects as pearlescent, metallic, fluorescent and tinsel, in addition to the normal 'transparents' and 'opaques'. There are grades tailor-made for the manufacture of modern light fittings and electrical equipment—grades that range from light stabilised CARINEX GP for lighting louvres to CARINEX HR for capacitors. Light in weight and low in cost, CARINEX polystyrene adds colour and quality to electrical products and flexibility and economy to your future planning.

Further details may be obtained from Shell Chemical Company Limited, 170, Piccadilly, London, W.1.
Regional Offices at London, Birmingham, Manchester, Glasgow, Belfast and Dublin.
Overseas enquiries should be directed to your Shell Company (or to
Shell International Chemical Company Limited, St. Swithin's House, St. Swithin's Lane, London, E.C.4.)
'SHELL' and 'CARINEX' are registered Trade Marks

SHELL

Shell Plastics mean brighter prospects

PS/7A

Whether you choose

LW
LIGHT

or

LW
DARK

you can be sure you have the best board for a good job

Manufactured by
LJUSNE-WOXNA A B., LJUSNE, SWEDEN

Sole Agents for U.K. (excluding N. Ireland)
MARTIN OLSSON (FIBREBOARDS) LTD., MELBOURNE HOUSE, ALDWYCH, LONDON, W.C.2

DESCRIPTION — "Moss Rigg" Olive Green Slate is a natural material, famous for its rich colour, texture and great durability.

USES — Wall Cladding, Cills, Steps, Jambs, Heads, Risers, Coping, Flooring, Shopfronts, Fireplaces and all types of Memorial work.

FINISHES — Sawn, Sanded, Finely Rubbed (i.e., polished) and Naturally Riven (i.e., naturally split, as shown by the illustration above).

SIZES — Slabs up to 5′ 0″ × 2′ 0″ can be supplied in any of the above mentioned finishes, with the exception of Naturally Riven, and in this finish the maximum size is 24″ × 18″

"MOSS RIGG" OLIVE GREEN SLATE SLABS

DETAILS — All work is normally carried out in accordance with Architects' drawings and Contractors' site details; if necessary a key plan to facilitate fixing will be supplied. Special cuttings, mouldings, etc., can also be undertaken provided exact details or a templet are supplied. Holes to take cramps, dowels, 'S' hooks etc., can also be drilled at our Works, thus enabling the Slate to be delivered to the site ready for fixing.

DELIVERY — Prompt delivery can be given to any part of the country by Road or Rail.

A TYPICAL SPECIFICATION

"The Cladding to be of 'Moss Rigg' Olive Green slate, obtained from The Lakeland Green Slate & Stone Co. Ltd., CONISTON, Lancashire, all 1″ thickness; to sizes as shown on detailed drawings, with a FINE RUBBED finish on all exposed faces, and drilled with No. 3 fixing holes per slab."

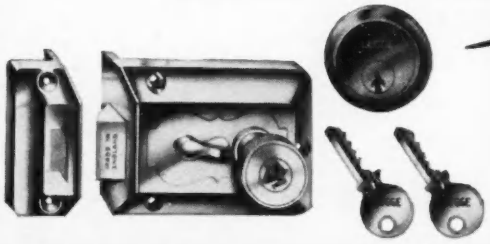
A Representative is always available to discuss any supply and fixing problems. Samples and Prices supplied on request to—

THE LAKELAND GREEN SLATE & STONE COMPANY LIMITED
"Moss Rigg" Quarries, Tilberthwaite, CONISTON, The Lake District, Lancashire
Telephones: Office—CONISTON 231 Works—LANGDALE 279

LEGGE DOOR FURNITURE
SELLS ON QUALITY AND PRICE

Legge locks and lock furniture are being used in home and office, town and country, because they are right in looks, quality and price.

Registered Trade Mark



THE 'RENOWN' design Mortice Lock Set (above)

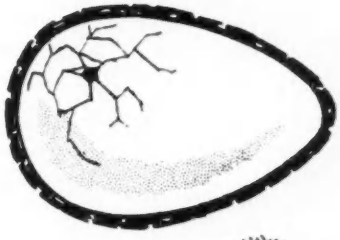
Cylinder Rim Night Latch (right)

LEGGE
J. LEGGE & CO. LTD.
WILLENHALL · STAFFORDSHIRE
Telephone 333

deliveries

are

right



on time

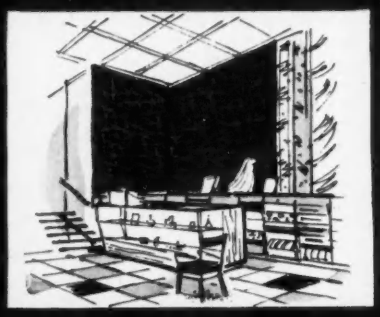
with **TUNNEL**

And it stands to reason: prompt deliveries lead to quicker sales: a faster turnover gives you increased profits!

Therefore, when it's a question of cement, give your orders to Tunnel, makers of Britain's finest cement for every purpose — ordinary Portland Cement, White & Coloured Cements, Masonry Cement and Sulphate Resisting Cement. You can rely on the Tunnel Delivery Fleet to carry out your instructions to the letter and the minute.

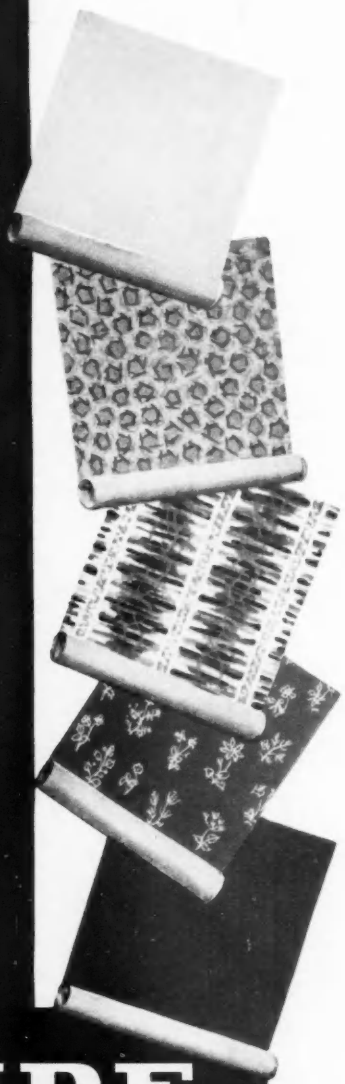
THE TUNNEL PORTLAND CEMENT COMPANY LIMITED · 105 PICCADILLY, LONDON W.1. GROSVENOR 4100

CVS-34



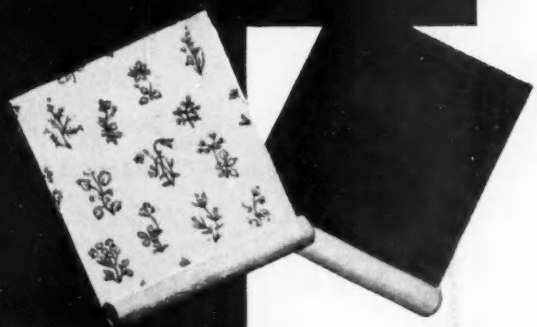
The quiet revolution

Whilst modern interior design has been making its unparalleled strides of recent years, a minor revolution has been taking place quietly in the background. This is the swing to vinyl as a wall covering. Now, with the introduction of Muralionide, this movement has gained rapidly in momentum. Muralionide is the first range of P.V.C. coated fabrics in the country to include patterns on large modular scales designed specifically for use as a wallcovering. It is most durable. Kicks, scratches and general wear and tear make little impression on its tough P.V.C. surface. Fabric-backed, Muralionide is chip-proof, peel-proof and washable. And the colours, fused in under high temperature, are resistant to fading. Yet practical as it is, Muralionide, with its matt finish and thick embossed texture, has the look and feel of luxury.



MURALIONIDE

vinyl wallcovering



For further information please write to:-

JAS. WILLIAMSON & SON LTD · LANCASTER

BONDS ANYTHING TO ANYTHING

Uni Bond

The Universal Adhesive and Bonding Agent

CEMENT SCREEDS
GRANOLITHIC
MAGNASITE
COMPOSITION

Ready for use, dries clear and quickly.
No hacking or keying.
Water-proof, weather-proof, mould-proof.
Works fast and with colossal strength,
indoors and outdoors.

Specified by leading Architects,
used extensively by Builders and Contractors,
the original Uni-Bond formula has proved its
reliability and performance
in working practice over the past seven years.

UNI-BOND is fully guaranteed—in fact,
we will refund twice the purchase price
if it does not stand up to our claims.

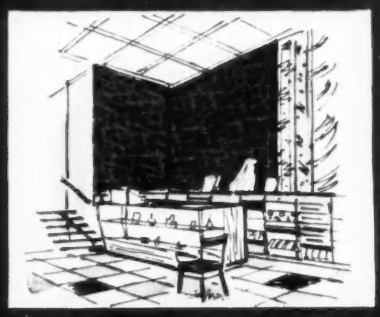
**AVAILABLE FROM
ALL GOOD
BUILDERS' MERCHANTS
AND IRONMONGERS.**

A permanent exhibit of Uni-Bond can be seen at the Manchester Building Centre, Portland Street, Manchester 1

For full details write or phone

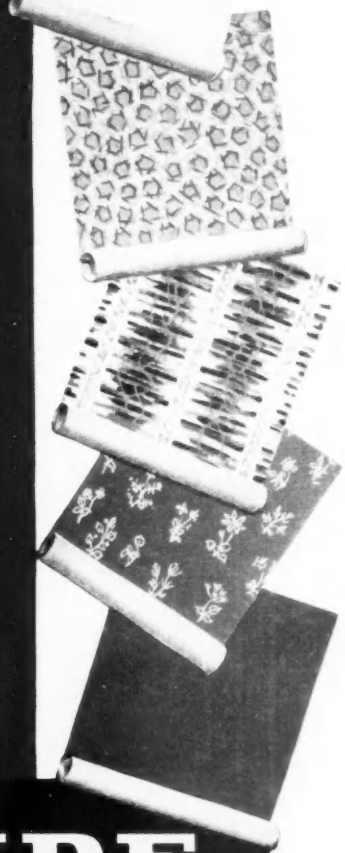
LIQUITILE SUPPLY CO. LTD.

48 HIGH STREET, CAMBERLEY, SURREY
Telephone: Camberley 2535



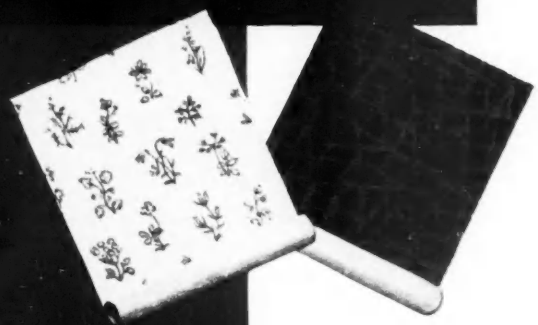
The quiet revolution

Whilst modern interior design has been making its unparalleled strides of recent years, a minor revolution has been taking place quietly in the background. This is the swing to vinyl as a wall covering. Now, with the introduction of Muralionide, this movement has gained rapidly in momentum. Muralionide is the first range of P.V.C. coated fabrics in the country to include patterns on large modular scales designed specifically for use as a wallcovering. It is most durable. Kicks, scratches and general wear and tear make little impression on its tough P.V.C. surface. Fabric-backed, Muralionide is chip-proof, peel-proof and washable. And the colours, fused in under high temperature, are resistant to fading. Yet practical as it is, Muralionide, with its matt finish and thick embossed texture, has the look and feel of luxury.



MURALIONIDE

vinyl wallcovering

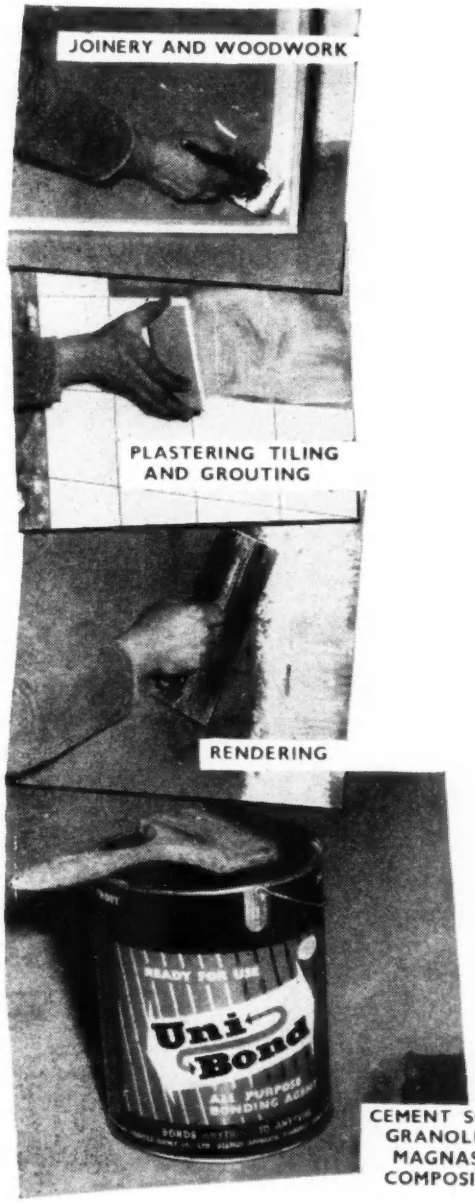


For further information please write to:-
JAS. WILLIAMSON & SON LTD · LANCASTER

BONDS ANYTHING TO ANYTHING

Uni-Bond

The Universal Adhesive and Bonding Agent



Ready for use, dries clear and quickly.
No hacking or keying.
Water-proof, weather-proof, mould-proof.
Works fast and with colossal strength,
indoors and outdoors.

Specified by leading Architects,
used extensively by Builders and Contractors,
the original Uni-Bond formula has proved its
reliability and performance
in working practice over the past seven years.

UNI-BOND is fully guaranteed—in fact,
we will refund twice the purchase price
if it does not stand up to our claims.

AVAILABLE FROM
ALL GOOD
BUILDERS' MERCHANTS
AND IRONMONGERS.

A permanent exhibit of Uni-Bond can be seen at the Manchester Building Centre, Portland Street, Manchester 1

For full details write or phone

LIQUITILE SUPPLY CO. LTD.

48 HIGH STREET, CAMBERLEY, SURREY
Telephone : Camberley 2535

D

FIRE RESISTING DOORS

★ **Armoured or Composite.**

★ **Sliding or Folding.**

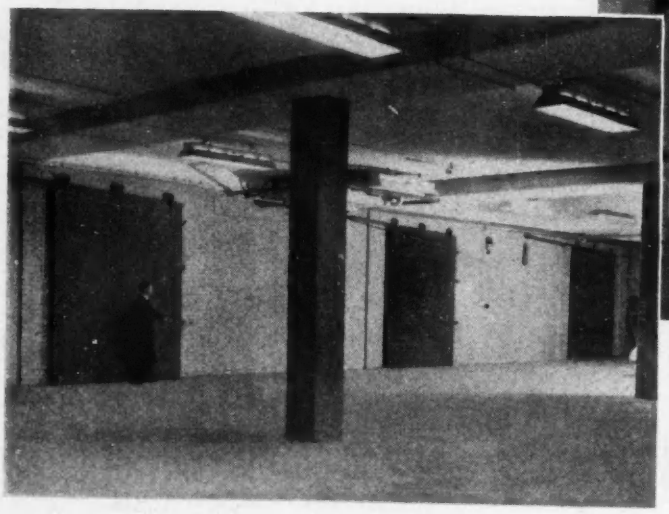
★ **Automatic or Non-Automatic.**

Mather & Platt fire resisting doors convert otherwise vulnerable openings in fire proof party walls into strong points halting the spread of fire.

Technical literature is available on request and representatives are ready to offer advice, without obligation, on fire protection problems.

Composite fire doors, hinged type.

Three Mather & Platt automatic sliding armoured fire doors at the works of a drawing office equipment manufacturer.



MATHER & PLATT
COMPOSITE FIRE RESISTING DOORS
ARE CONSTRUCTED IN COMPLIANCE
WITH THE RULES OF THE
FIRE OFFICES' COMMITTEE
AND WITH THE REQUIREMENTS
OF THE LONDON COUNTY COUNCIL.

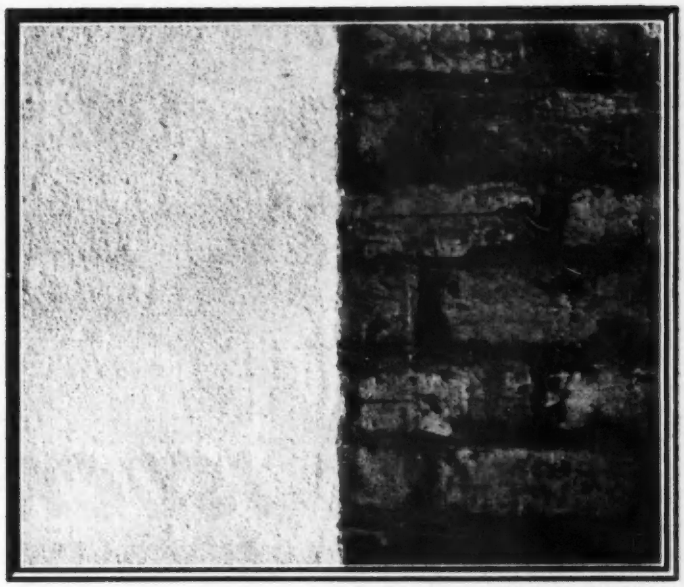
A32/1

Mather & Platt
LIMITED

PARK WORKS
MANCHESTER, 10

Telephone : COLlyhurst 2321
Telegrams : Sprinkler, Manchester

A COAT OF STONE . . .



Above: 2 coats of Silexine on old brickwork

Beautifies and Protects New Buildings

And Creates New Buildings from Old

SILEXINE is ideal for Stucco, Cement, Brickwork etc. on the *exterior* of buildings giving a *water repellent, durable textured finish with CHARACTER and EYE APPEAL.

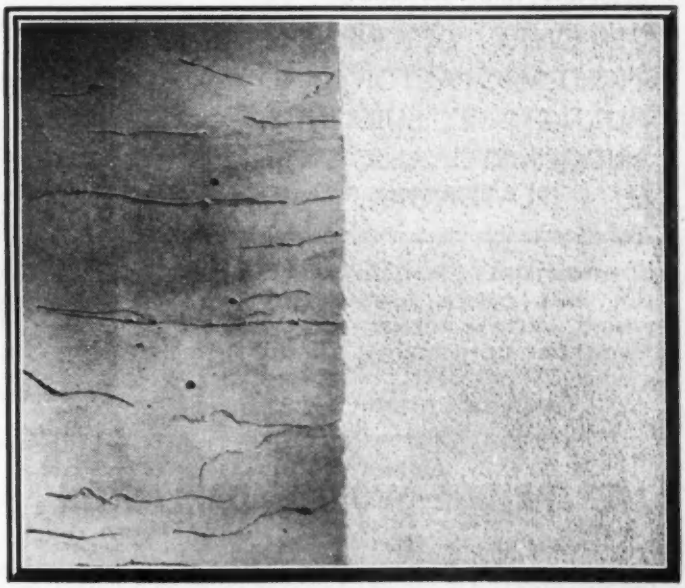
SILEXINE hides imperfections and flaws, disguises pointing, improves bad or cracked rendering and is water repellent.

Available in 13 permanent colours.

* *Building Research Report available on application.*

SILEXINE STONE PAINT

Below: 2 coats of Silexine on cracked rendering



Full details, shade card and applied sample on request to the sole manufacturers

DENTON EDWARDS PAINTS LTD.

Abbey Road, Barking, Essex. RIPpleway 3871

Sections — *Synopsis*

1 *Isocrete Sealed-Cell Lightweight Concrete.*
2 *The Thermal Insulation Act, 1957.*
3 *Isocrete for Roof Insulation.*
4 *Isocrete for Lightweight Floor Screeds.*
5 *Isocrete for Insulation of Heated Pipelines.*
6 *Model Specifications.*
7 *Joint Guarantee with Roofing and Flooring Contractors.*

11" x 8" - 28 PAGES

THE

ISOCRETE IN SITU LIGHTWEIGHT CONCRETE

DATA BOOK

". . . the most comprehensive reference book to lightweight concrete available at the present time . . ."

Copies are available to Architects, Engineers, Surveyors, Contractors, etc. on request to:

ISOCRETE COMPANY LIMITED

124 Victoria Street, London, S.W.1.

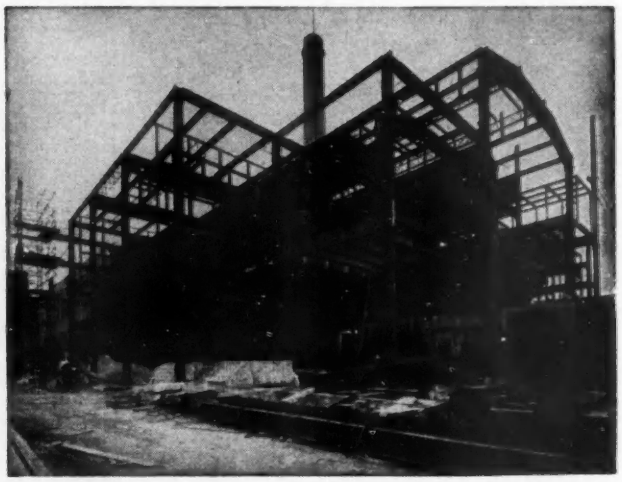
Tel.: VICtoria 6780

E. C. & J. KEAY LTD.

Constructional Engineers and Bridge Builders

STRUCTURAL STEELWORK OF EVERY DESCRIPTION, INCLUDING FACTORY AND MULTI-STOREY BUILDINGS, BRIDGES, ETC. ALSO STEEL PLATEWORK.

CONTRACTORS TO H.M. ADMIRALTY, H.M. WAR OFFICE, MINISTRY OF WORKS, CROWN AGENTS, BRITISH TRANSPORT COMMISSION, UNITED KINGDOM ATOMIC ENERGY AUTHORITY, ETC.



New Generating Station—Nechells for the British Electricity Authority

Architects: J. Alfred Harper & Son

JAMES BRIDGE WORKS, DARLASTON

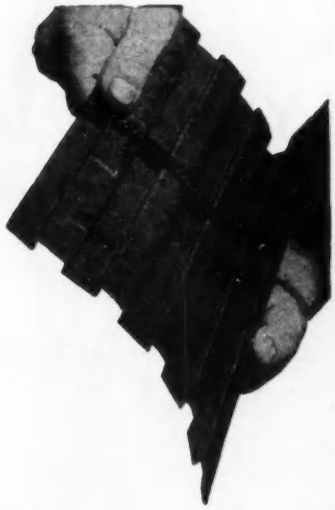
Telephone: James Bridge 2661

Telegrams: "Keay, Birmingham"

Also LONDON and SOUTHAMPTON

Head Office: "RUNNYMEDE," HENLEY-IN-ARDEN, SOLIHULL, WARWICKSHIRE

Telephone: 211 HENLEY-IN-ARDEN



NEWTONITE LATH

damp

Architects and Builders concerned with the maintenance of property cannot ignore the claims of NEWTONITE LATH for damp wall treatment. Gives internal protection which otherwise could be obtained only by new horizontal damp-proof courses and at much less cost.

wall

Whatever the state of the walls the new plaster is held in isolation from water staining, salts from sea-water saturation or any other alkalinity in the brickwork.

treatment

NEWTONITE LATH

A fibre base material corrugated to form a dovetail key. Impregnated and stiffened with a water-proof composition and reinforced with metal strips running across the surface. It is vermin-proof and will not stain plaster. For internal or external use. Manufactured in rolls 5 yards long by 1 yard wide.

Samples and prices upon application

NEWTONITE LIMITED

12 VERNEY ROAD, LONDON, S.E. 16

BERMONDSEY 1217 & 1423

Time mattered little in Grandpa's day...

...but NOW.... there's

BURN BROS
(London) Ltd.

for Fast deliveries
of CAST IRON
AND
OIL-FIRED DOMESTIC BOILERS
and RADIATORS

We now stock KEY Pitch Fibre Drain Pipes

CRAY AVENUE, ST. MARY CRAY, ORPINGTON, KENT.

Telephone: Orpington 31311

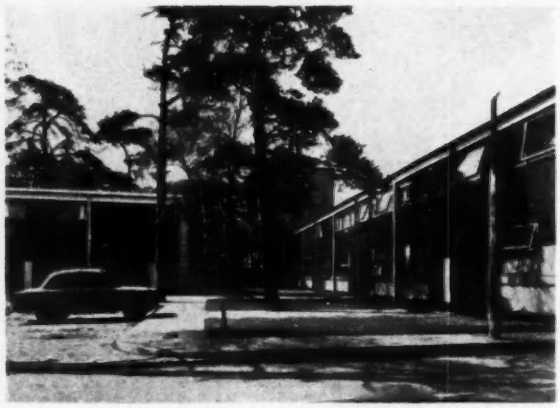
Also at Weirside Works, Lower Bristol Road, Bath Telephone: Bath 78681

A Member of the Lovell Group

WALTER LILLY & CO. LTD.

BUILDING CONTRACTORS

Craftsmanship & Service



Since 1860

Contemporary Housing, Inner Park Road, Wimbledon, S.W.

Chartered Architects : Andrews, Emmerson & Sherlock

8 ST. ANN'S STREET, WESTMINSTER, LONDON, S.W.1 *Telephone:* ABBey 4661

High-Class Joinery Flush Doors and Precision Woodwork

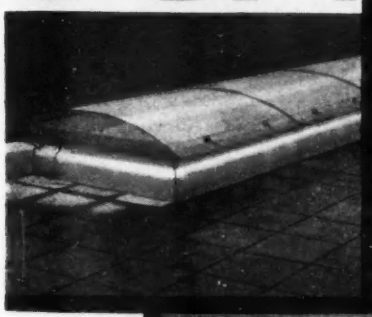
R. CATTLE LIMITED

(Established 70 years)

1-5 Everitt Rd., Chase Rd., North Acton, N.W.10

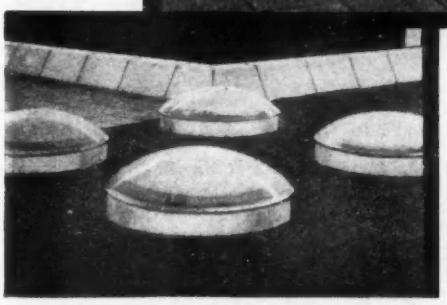
Telephone: ELGAR 5411 (4 lines)

COX DOMES For the Princess Margaret Hospital Swindon



Purpose-made continuous barrel roof lights with full vision fabricated ends. This is the latest Cox roof light, specially designed for the Princess Margaret Hospital.

Standard rectangular Cox Domes



Standard circular Cox Domes

Architects: Powell & Moya F./F.R.I.B.A. in association with W. J. Jobson (Regional Architect, Oxford Regional Hospital Board).
Main Contractors: W. E. Chivers & Sons Ltd.

COX Domes for Added Light.

Virtually unbreakable, these roof lights are available in circular, square or rectangular shapes in either clear "Perspex" (which has a light transmission of 92 per cent), or in diffused opal for privacy and anti-glare.

Williaam J. COX (SALES) Ltd.

"PERSPEX" FABRICATORS AND SHAPERS
(A.I.D. approved No. 3676/42)
LONDON ROAD, TRING, HERTFORDSHIRE. TRING 3286/7/8

The plugging drill with the tip electronically brazed with copper for use
IN ALL ELECTRIC DRILLS

MASON MASTER

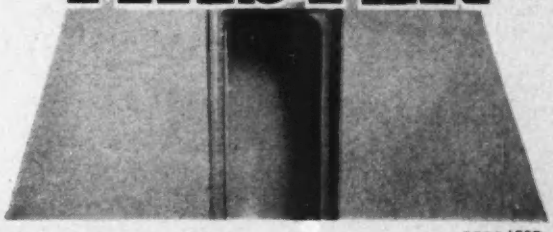
MASON MASTER WALL & FLOOR DRILLS

are the most robust drills on the market for larger holes in masonry, they will outlast any other tipped drill.
Keep them sharp on a Green Grit C80MV Wheel and they will pay for themselves times over.
Sizes from ¼" to 1½" Cutting Diameter, 6" – 12" – 15" length also type S.F.S 12" lengths with threaded shanks to take any number of extension sleeves.

CONCRETE MASTER

This trepanning tool has a minimum of cutting surface to lessen the pressure required for penetration on large diameter holes in Concrete and most masonry materials.
Size from ½" to 6" cutting diameter, 6" and 12" lengths—the 12" having threaded shanks to take any number of extension sleeves.
STARTER BITS are available for these drills to ensure exact location of the hole and easy starting.

CONCRETE MASTER



For further information send to CODE 153B

JOHN M. PERKINS & SMITH LTD.,
BRAUNSTON, RUGBY. *Telephone: Braunston 351-2.*

"TECO"
Double-bevelled
SPLIT RING
To B.S. 1579

Essential components for BETTER timber structures.

AN ANNOUNCEMENT ABOUT

TIMBER CONNECTORS

"TECO"
Heavy duty
SHEAR PLATE
To B.S. 1579

"TECO"–"BULLDOG"–"TRIP-L-GRIP"

These three brands have become so well known over a period of years that they are in danger of being considered generic terms for types of timber connectors. It is necessary to make clear that these names are in fact

REGISTERED TRADE MARKS

applicable only to "TECO" 2½" dia. & 4" dia. DOUBLE BEVELLED SPLIT-RINGS. "TECO" 2⅝" dia. & 4" dia. heavy duty pressed & malleable SHEAR PLATES. "BULLDOG" toothed-plate connectors (five sizes). "TRIP-L-GRIP" FRAMING ANCHORS—for stronger nailed joints. To specify and use these branded timber connectors is your assurance that they are manufactured to B.S.1579 where applicable.

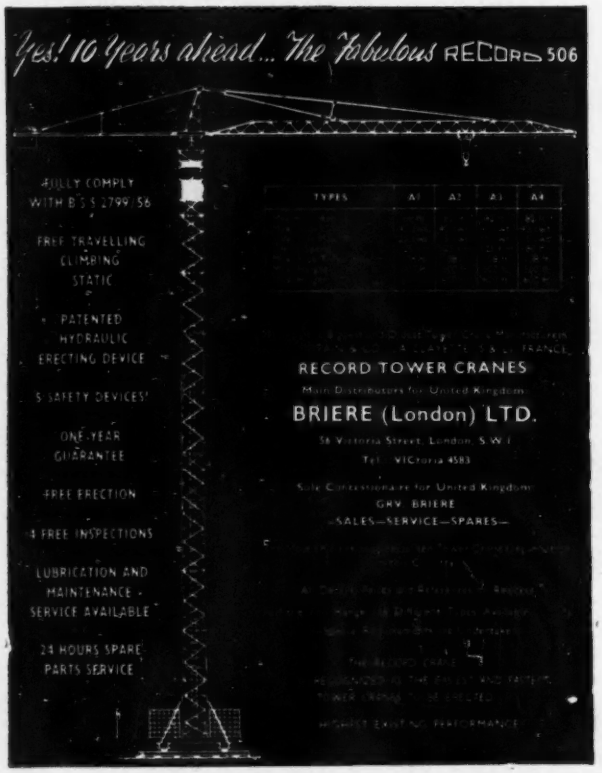
DESIGN & GENERAL DATA AVAILABLE FROM

"BULLDOG"
circular
Toothed Plate
To B.S. 1579

MACANDREWS & FORBES
LIMITED
2 CAXTON STREET · LONDON · S.W.1
TEL: ABBEY 4451-3

When ordering, *specify* and *insist* that you get—
"TECO" "BULLDOG" and "TRIP-L-GRIP" brands.

"TRIP-L-GRIP"
Framing Anchors



Telephone: ENField 8383/4/5 Telegrams: Quality, Enfield

SHUTTER CONTRACTORS

LIMITED

LINCOLN WORKS

GREAT CAMBRIDGE RD · ENFIELD · MIDDX.

LONDON: 12 DUKE STREET, ST. JAMES'S, S.W.1
Telephone: WHitehall 6988

MANUFACTURERS OF

Quality

ROLLING SHUTTERS IN STEEL, WOOD & ALUMINIUM ALLOY

FOR ALL TYPES OF BUILDINGS

APPROVED MANUFACTURERS TO F.O.C. AND L.C.C. REQUIREMENTS

CONTRACTORS TO H.M. GOVERNMENT - ALL DEPARTMENTS, PUBLIC UTILITY COMPANIES, COUNCILS, PRINCIPAL RAILWAYS INSTITUTIONS ETC.

JOSIAH PARKES & SONS LTD. UNION
UNION WORKS · WILLENHALL · STAFFS · ENGLAND
BUSH HOUSE, LONDON · JOHANNESBURG, SOUTH AFRICA. EST. 1840

EDWIN SHOWELL & SONS LTD. SHOWELL
STIRCHLEY · BIRMINGHAM 30 · ENGLAND
BUSH HOUSE, LONDON

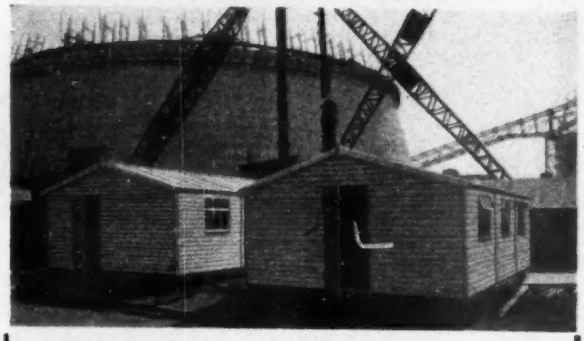
CLEAN AS A WHISTLE

When you start with smooth bore copper, you're half way to success in waste traps and preformed plumbing. Add Econa experience throughout the world on municipal and private contracts, plus a pinch of inspiration and you've got the recipe for trouble-free service that has made Econa top in the field. For waste traps and preformed plumbing that you can install and forget —

PLEASE CONSULT

ECONA

ECONA MODERN PRODUCTS LTD, AQUA WORKS, HIGHLANDS ROAD, SOLIHULL, WARKS. Tel: SOLihull 4981



Site Huts

We can quickly supply Redwood Weatherboard Site Huts in standard sizes, or to your own specification, as already used by many leading contractors.

Photograph by courtesy of Alexander Finley & Co. Ltd., Motherwell.

FREE DELIVERY ENGLAND & WALES

L. & D. ABLESON LTD

SHEEPSCAR CORNER, LEEDS 7

Tel: 31509 & 25637

LEVELTEX

SCREEDING COMPOUND

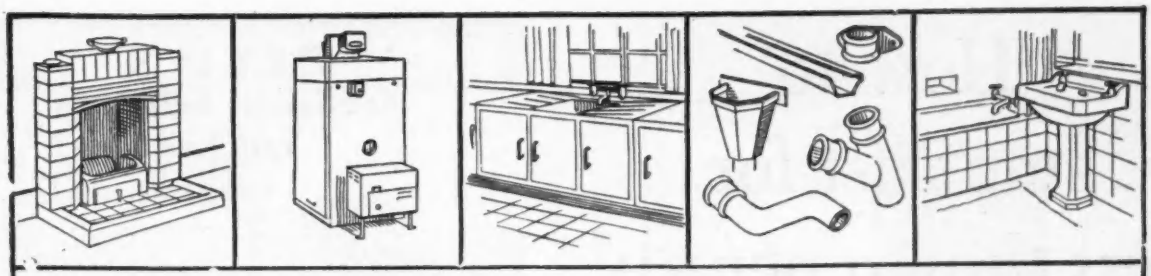
Is a means of levelling uneven surfaces, i.e., concrete, granolithic, floorboards, Tiles, Flagstones, Brickpaving, etc., to receive Floor-finishes such as Linoleum, carpets, wood-block, parquet, cork tiling, etc., with a minimum of thickness. It can be laid from $\frac{1}{16}$" to $\frac{1}{4}$" thickness and can be trowelled to a "feather-edge." Setting time is approximately 5—7 hours and hardening time 12—14 hours according to atmospheric conditions.

Write for particulars to

TILE FLOORS

(INDUSTRIAL) LTD., YEOMAN STREET, LONDON, S.E.8.

Telephone: Bermondsey 3237



TRAVIS & ARNOLD LIMITED

INCORPORATING

JOHN EEDE BUTT & SONS

Travis and Arnold offer a *complete* service to the Building Trade. Their stocks of timber (including protim and protim-treated timber), building materials and house components are among the most comprehensive in the country. T. & A. branches throughout England provide quick and friendly attention to all building needs.

TIMBER IMPORTERS & BUILDERS' MERCHANTS • HEAD OFFICE: NORTHAMPTON • *Branches throughout the country*

How to stop rust for *less than a penny* a square yard!

Any metal that is exposed to wear and weather—roofs, railings, fire escapes, fences—is effectively and economically protected against rust by Presomet.

A high-grade bituminous paint that *preserves* and *protects* metal surfaces—Presomet

ALL OUTSIDE SURFACES need protection against weather. You can stop metal surfaces from rusting, wood or felt surfaces from deteriorating, simply by applying Presomet, a high-grade bituminous paint that is manufactured by the National Coal Board and covers for only 1d. per square yard.

Presomet forms a glossy, durable surface that lasts and *lasts*, even under the worst weather conditions and rough treatment. Yet Presomet is very easily applied by brush, spray, or by dipping, and flows exceptionally smoothly.

Presomet

Supplied in three grades from your dealer or direct from the

National Coal Board

BY PRODUCTS, N.P. BANK BUILDINGS, DOCKS, CARDIFF

"Presomet" is a Registered Trade Mark

PEEL'S
sectional buildings
quickest up!
longest up!

* Easy to erect
* New timber throughout
* Extensive range of standard designs
* Individually designed if required
* Free delivery within 200 miles radius

Send for PEEL'S comprehensive catalogue and price list, or ask for representative to call.

H. PEEL LTD.

Mearclough Works, Wakefield Road, Sowerby Bridge, Yorkshire. Tel.: Halifax 81211

TEAK TURNER AND HARDWOODS HUNTERS

R. M. TURNER & HUNTERS LTD.

(Established 1802)

Wansbeck Road, Victoria Park, London, E.9

Telephone: Amherst 8221 (5 lines) and at Aldermaston

Portable Saw Benches

Petrol, Diesel, or Electrical 22", 24", 30" & 33"

FOR SALE OR HIRE

Built to withstand hard wear.
Simple to operate.
Completely portable.
May be had on hire with option to purchase.

Write for further details to:

LEWIS & LEWIS LTD
SCHOOL RD., NORTH ACTON, LONDON, N.W.10
OR TELEPHONE:
ELGAR 6757 (4 LINES)

HUBBUCK'S PAINTS

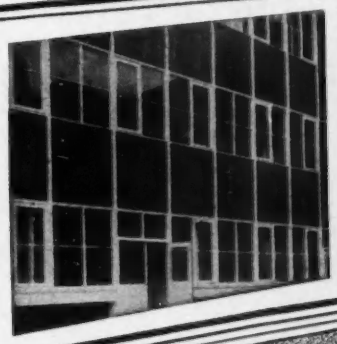
D.G.E.

A QUALITY
GLOSS ENAMEL
OF OUTSTANDING
DURABILITY

Sole Manufacturers:
THOMAS HUBBUCK & SON LTD.
EST. 1765
Head Office: 24, LIME STREET, LONDON, E.C.3.
Telephone: MANSION HOUSE 2468
Works: HUBBUCK'S WHARF, THE HIGHWAY, E.I.
Telephone: STEPNEY GREEN 3377
Contractors to ADMIRALTY, BRITISH RAILWAYS, etc.

Reflections on successful Curtain Walling Projects.

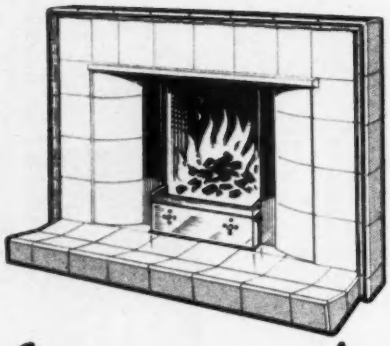
m



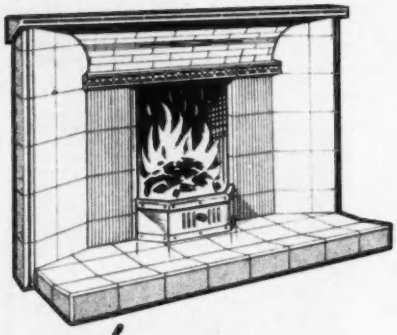
Architect: Richard Mellor, Esq., F.R.I.B.A., Architect to the Board, S.W. Metropolitan Regional Hospital Board.
Contractors: Frank Batty & Smith Ltd., London, W.2

Two aspects of
St. James' Hospital, Balham

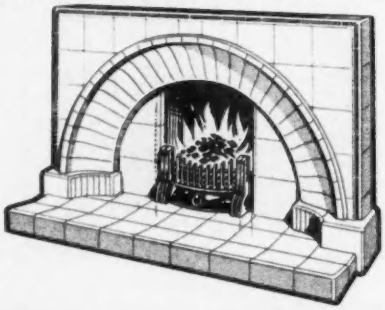
H. C. JANES LIMITED
BARTON · BEDFORDSHIRE
TELEPHONE: HEXTON 7443



for every home



there's a —



ROYAL VENTON

FIREPLACE

(Top) Design No. 1852
48" × 33" × 6" R.T.W.
Fire Opening 16" × 22"
4" Recess.
R/H: 45¼" × 16" × 3⅜" high.

(Centre) Design No. 1855
52¼" × 34½" × 5" R.T.W.
Fire Opening 16" × 22"
4" Recess.
R/H: 47¼" × 18" × 3⅜" high.

(Bottom) Design No. 9916
56" × 34" × 8⅜" R.T.W.
Fire Opening 16" × 20"
6¾" Recess.
R/H: 54" × 18" × 3⅜" high.

ROYAL VENTON WORCESTER SANITARY WARE

JOHN STEVENTON & SONS LTD., BURSLEM, STOKE-ON-TRENT, STAFFS.
Tel: Stoke-on-Trent 84261/2 · 'Grams: Steventon, Burslem

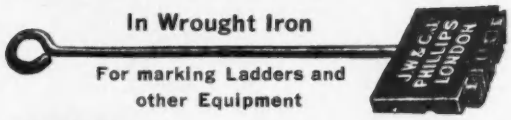
SMARTER NAME BOARDS AT LESS COST BY USING PHILLIPS' ALUMINIUM

E LETTERS

Letters for all purposes in Aluminium, Bronze, Sheet Metal or Wood

BRANDING IRONS

In Wrought Iron



For marking Ladders and other Equipment

REVERSE LETTERS AND PLATES

For use in Moulds for Concrete Products, Brick Moulds, etc.

STENCILS in Zinc, Brass, Copper

J.W.& C.J. PHILLIPS LTD.
POMEROY ST., NEW CROSS, LONDON, S.E.14.
TELEPHONE: NEW CROSS 6205 AND 1677.

The Name That Ensures Really Top Grade Products

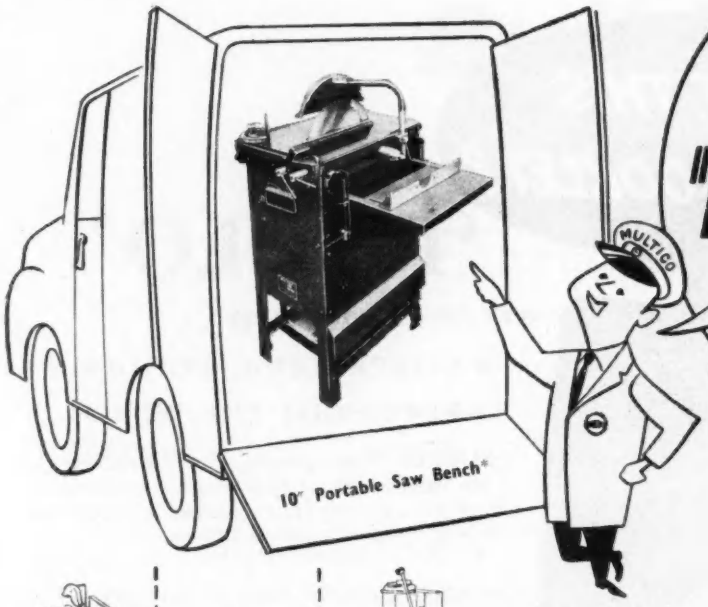
SHAFTESBURY

SHAFTESBURY LADDERS LTD., KATHERINE ROAD, LONDON, E.7

Write or Phone for Lists

Large Stocks Always Available for Prompt Delivery

PHONE: GRANGEWOOD 3363-4



LET US DEMONSTRATE THE ADVANTAGES OF

"MULTICO"

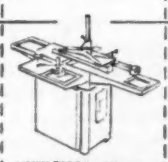
WOODWORKING MACHINES

FREE!

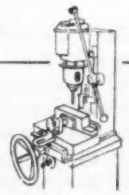
Our demonstration vans will visit your site or workshop and give FREE demonstrations. Our model workshop is available from 8.30 a.m. to 7.30 p.m. to assist and train your operators. Transport from station arranged to suit your convenience. Multico service is unequalled.

** either petrol or electric*

"MULTICO" 12"* or 14/16" SAW BENCH



"MULTICO" 6" or 9" PLANER WITH TENONING & THICKNESSING ATTACHMENTS



"MULTICO" MORTISING MACHINE

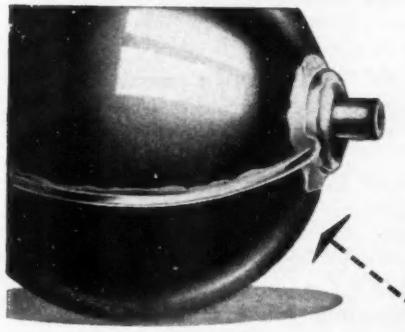
WRITE OR PHONE NOW!

Hire Purchase Facilities Available

KINÉ ENGINEERING CO. LTD.

MULTICO WORKS · SALFORDS · REDHILL · SURREY

Tel.: HORLEY 1388 Telegrams: MULTICO, REDHILL

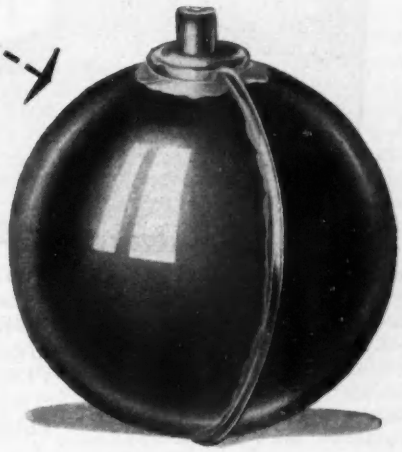


3 types of copper floats to meet all demands

SOLDERED

BRAZED

SOLDERLESS



All MBL Copper Cistern Floats are produced to British Standard Specification and carry a guarantee for consistent high quality and finish. Always look for the MBL trademark—every genuine one carries it.

BRITISH STANDARD No. 1968

MBL COPPER FLOATS

THE MINT, BIRMINGHAM, LTD., BIRMINGHAM, 18

Telephone: CENTRAL 7742 *Telegrams:* "MINT" BIRMINGHAM.

HAVE YOU GOT THIS VALUABLE BOOKLET?

'PUDLO'

CEMENT WATERPROOFING POWDER THROUGHOUT THE WORLD

'PUDLO' Throughout The World (available FREE on request) contains a selection of authentic photographs illustrating and describing various building projects with which "PUDLO" Waterproofer has been associated.

'PUDLO' Cement Waterproofing Powder is used for the integral waterproofing of all types of concrete structures "in situ" and precast; also renderings, stucco, artificial stone, mass concrete, floors, basements, reservoirs, swimming pools, etc. It can be used to retain or exclude water in all types of construction from small basements to hydro-electric schemes.

Other famous 'Pudlo' products are:

'PUDLO' External Water Repellent
An excellent external waterproofer. A colourless treatment for brickwork, masonry, precast concrete, etc.

'PUDLO' Waterproof Cement Paint
An excellent waterproofing material with a decorative finish in a superior range of colours.

'PUDLO' Cement Paint Primer
For priming difficult surfaces such as asbestos, clay bricks, plasterboard, etc., prior to application of paints.

'PUDLO' Cement Bonder
For ensuring adhesion of cement/sand renderings and toppings. Also for dustless and oil-resistant floors, etc.

'PUDLO' Plaster Bonder
To eliminate all hacking and provide a key for gypsum plasters and cement/sand backing coats.

'PUDLO' Mortar Plasticiser To eliminate the use of lime in cement/sand mortars, reducing waste and frost spalling.

'PUDLO' Rapid Hardener & Frost Protector To accelerate rapid hardening and quick setting for all types of concrete work.

'PUDLO' Surface Hardener and Dust-Proofer To provide a permanently dust proof surface; resistant to chemical attack of alkalies and acids.

'FEUSOL' Fire Cement For the setting of Boilers, Ovens, Firegrates, etc.

Our technical service is at your disposal and free advice will gladly be given on any problem.

There are 'PUDLO' Agents in most countries throughout the world. In case of difficulty please write to the sole manufacturers:

KERNER-GREENWOOD & CO. LTD · KING'S LYNN · NORFOLK · Telephone: King's Lynn 2293

WT.17

News Summary

267 *Recent criticisms of current school designs made by Sir Frank Markham, MP, have drawn a reply from the Buckinghamshire County Architect.*

283 *The Queen's University, Belfast, has invited discussions on the future of architectural education in the city.*

285 *Hospital design and construction is to be investigated by the Building Research Station with a view to reducing costs in the large building programme that is planned over the next six or seven years.*

285 *Government-employed architectural and engineering draughtsmen are pressing for salary increases ranging from £50 to £325 a year.*

286 *The Scottish Joint Committee for National Certificates and Diplomas in Building has agreed to a common syllabus for building trade education in Scotland.*

287 *A committee of MPs has reported to Parliament that they believe that 'such highly inaccurate estimates' as had occurred on road construction schemes might vitiate the Treasury's control over the allocation and use of resources.*

289 *The value of new orders obtained by contractors for new housing points to a further rise in house building this year, with the bulk of the extra demand coming from private developers, states a Treasury review.*

290 *In the first six months of 1960 143,934 permanent houses were completed in Great Britain compared with 130,016 in the same period of 1959.*

'Late News' will be found overleaf, and 'News of the Week' on page 281

Builder

INCORPORATING ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CXCIX August 12th 1960 No. 6117

Published from 'The Builder' House, Catherine-street, Aldwych, London, WC2. Telephone: Temple Bar 6251-2-3-4. Annual subscription: £4; for six months £2. Single copies (including back numbers up to 12 months old) 1s. 6d. (post paid 2s.). Indices free on application.

PRINCIPAL CONTENTS

ILLUSTRATIONS

PAGE

268 Combe Down Secondary School, Bath. By Howard V. Lobb & Partners

274 Private House at Cobham, Surrey. By Edward Banks and R. P. Mills

276 Sports Pavilion, Essex. By Stratton Davis & Yates

278 Aircraft Hangar, Gatwick. By Clive Pascall, Peter Watson & Associates

ARTICLES

267 Criticisms of School Design: Mr. Pooley Replies for Buckinghamshire

272 Architectural Education: Mr. Baines's Reflections on Oxford Conference

282 Letters to the Editor

283 RIBA Final Examinations: Successful Candidates

284 More Everyday Things—2. By Arthur W. Kenyon, CBE

285 BRS to Study Hospital Building Costs

287 Government Expenditure on Roads and Public Buildings Criticised

289 Activity in the Building Industry: Rising Demand

291 Building in the City: New Car Parking Standards

This is the Architect's Life

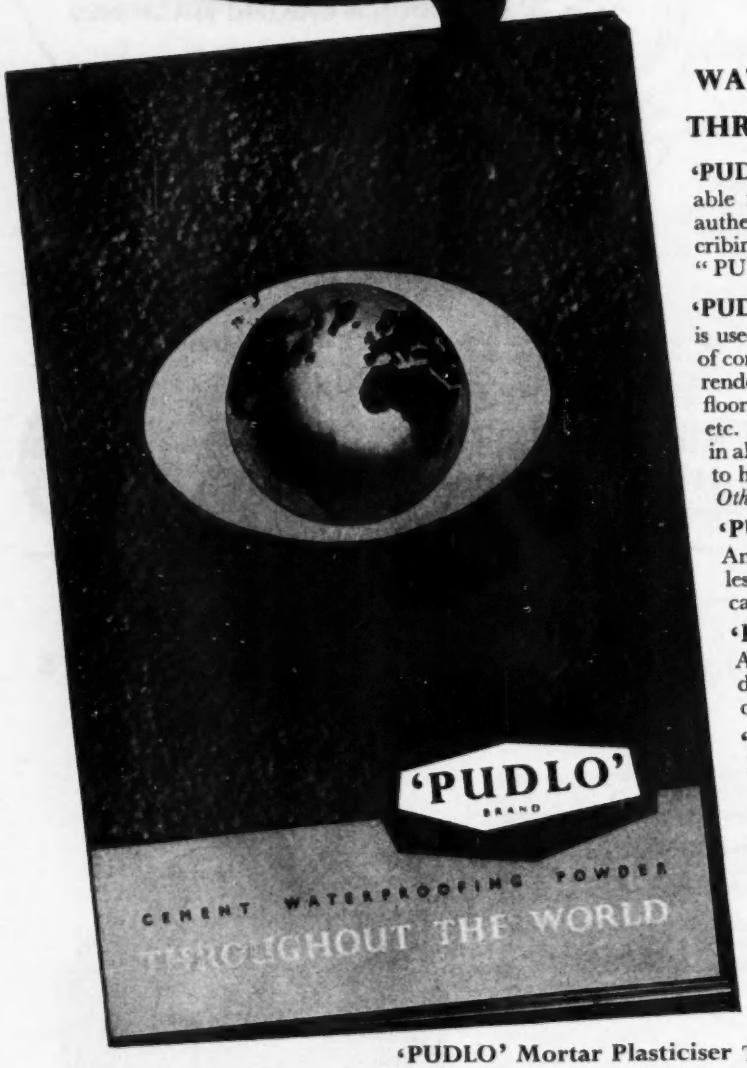
this country is one
of all official activi-
rkers are among the
this personal work
ost to the effective-
ears of its existence.
he central direction
n made possible.
esses by which this
we qualified to do
of Careers' hand-
y, and in particular
has been brought
died with care and
ualified to explore,
ntent we have not
e tools to be used
many other tools
hands of the crafts-
s.
t help feeling that
with the grandeur
he many practical
tal excitement and
hitecture offers to
ether they be concerned with large buildings or with those smaller works the sum of which can embellish or degrade whole districts.

The overall impression which this handbook creates is that architecture is but one of a number of businesses which offer a young person a pleasant and profitable career. In a sense this is the purpose of such a series, and there is no doubt that many school leavers and their parents go home armed with a selection of publications for the purpose of analysing their comparative potentialities. Between many careers this may be a useful and effective process, but we are quite sure that architecture is not one that can fall into such a group. It is in fact almost unique in being at once an art, a business and a profession, requiring mental characteristics in which are combined the inspiration of an artist, the sense of responsibility of an engineer, and the common sense of a business man. This cannot be compared or weighed against the simpler make-up of most other careers, and comparatively few are fitted to enter upon it. Only the young person who has an urge to build and beautify and who can conceive no other tolerable calling should consider architecture as his life's work.

It may be that architecture has become the business pictured in this handbook, that it is less of an art and more of a profession than it used to be. A good deal of the architecture of our times does seem to be the product

HAVE YOU GOT THIS VALUABLE BOOKLET?

'PU



WATERP
THROUG

'PUDLO' T
able FREE o
authentic p
cribing vari
"PUDLO"

'PUDLO' C
is used for th
of concrete s
renderings, s
floors, base
etc. It can
in all types
to hydro-el
Other famou

'PUDLO
An excell
less treat
cast conc

'PUDL
An exce
decorati
colours.

'PUDL
For p
asbesto
prior t

'PUD
For c
rende
and c

'PUI
To c
key f
back

'PUDLO' Mortar Plasticiser To elim
mortars, reducing waste and frost spallin
'PUDLO' Rapid Hardener & Frost
hardening and quick setting for all types c
'PUDLO' Surface Hardener and D
manently dust proof surface; resistant to c
'FEUSOL' Fire Cement For the settin

Our technical service is at your disposal and
problem.
There are 'PUDLO' Agents in most countries throughou
sole manufacturers:

KERNER-GREENWOOD & CO. LTD · KING'S LYNN · NOR

Late News

Oxford Roads Inquiry

AGREEMENT to hold an inquiry into Oxford City Council's three comprehensive relief road schemes for the city has been notified to the council by Mr. Henry Brooke, Minister of Housing and Local Government. The council agreed last month, on the recommendation of its planning committee, to ask the Minister to hold the inquiry so as to obviate further delay on road plans.

The Minister will hold the inquiry into three schemes, or any permutation of them. He states that he will be prepared to consider any other schemes that may be put forward.

No date has yet been fixed for the inquiry, but Mr. Brooke accepts that it should be held as soon as possible. The next step will be for the Minister to give notice of the local inquiry, and the council will be required to deposit for inspection plans for the three schemes. There will also be available for inspection plans of the various combinations of road proposals which could be selected from them.

A suggestion by Lord David Cecil for creating a traffic-free area in the neighbourhood of the University is discussed in Notes of the Week.

Technical College Contract

LINDSAY (LINCOLNSHIRE) COUNTY COUNCIL have been awarded the contract for phases III and IV of North Lindsay Technical College, to be built at Kingsway, Scunthorpe, to Messrs. J. W. Hill, of Scunthorpe. The contract price, £234,755, was the lowest of six received. The county architect is Mr. A. Ronald Clark, ARIBA, AMTPI.

The Builder

INCORPORATING ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CXCIX August 12th 1960 No. 6117

Published from 'The Builder' House, Catherine-street, Aldwych, London, WC2. Telephone: Temple Bar 6251-2-3-4. Annual subscription: £4; for six months £2. Single copies (including back numbers up to 12 months old) 1s. 6d. (post paid 2s.). Indices free on application.

PRINCIPAL CONTENTS

ILLUSTRATIONS

PAGE

268 Combe Down Secondary School, Bath. By Howard V. Lobb & Partners

274 Private House at Cobham, Surrey. By Edward Banks and R. P. Mills

276 Sports Pavilion, Essex. By Stratton Davis & Yates

278 Aircraft Hangar, Gatwick. By Clive Pascall, Peter Watson & Associates

ARTICLES

267 Criticisms of School Design: Mr. Pooley Replies for Buckinghamshire

272 Architectural Education: Mr. Baines's Reflections on Oxford Conference

282 Letters to the Editor

283 RIBA Final Examinations: Successful Candidates

284 More Everyday Things—2. By Arthur W. Kenyon, CBE

285 BRS to Study Hospital Building Costs

287 Government Expenditure on Roads and Public Buildings Criticised

289 Activity in the Building Industry: Rising Demand

291 Building in the City: New Car Parking Standards

This is the Architect's Life

THE YOUTH EMPLOYMENT SERVICE in this country is one of the most fruitful and imaginative of all official activities, and its officers and voluntary workers are among the most devoted of public servants. It is this personal work within the system which contributes most to the effectiveness it has developed in the very few years of its existence. At the same time credit is also due to the central direction under which this achievement has been made possible.

It is not for us to describe the processes by which this good work operates, nor indeed are we qualified to do so, but we are aware of the 'Choice of Careers' handbooks which form part of its machinery, and in particular that dealing with the architect,* which has been brought to our notice, and which we have studied with care and interest. This is a field we are well qualified to explore, and if we are at all critical of its content we have not forgotten that this is merely one of the tools to be used in a very human cause, and that like many other tools it is a dull thing until it is seen in the hands of the craftsman and used with the skill it requires.

Judged by itself, however, we cannot help feeling that it does little to fire the young aspirant with the grandeur of the field he is invited to enter. The many practical factors in building tend to hide the vital excitement and satisfaction which the practice of architecture offers to those who devote themselves to it, whether they be concerned with large buildings or with those smaller works the sum of which can embellish or degrade whole districts.

The overall impression which this handbook creates is that architecture is but one of a number of businesses which offer a young person a pleasant and profitable career. In a sense this is the purpose of such a series, and there is no doubt that many school leavers and their parents go home armed with a selection of publications for the purpose of analysing their comparative potentialities. Between many careers this may be a useful and effective process, but we are quite sure that architecture is not one that can fall into such a group. It is in fact almost unique in being at once an art, a business and a profession, requiring mental characteristics in which are combined the inspiration of an artist, the sense of responsibility of an engineer, and the common sense of a business man. This cannot be compared or weighed against the simpler make-up of most other careers, and comparatively few are fitted to enter upon it. Only the young person who has an urge to build and beautify and who can conceive no other tolerable calling should consider architecture as his life's work.

It may be that architecture has become the business pictured in this handbook, that it is less of an art and more of a profession than it used to be. A good deal of the architecture of our times does seem to be the product

of such a revolution and sends out no spark to kindle that delight which great architecture has always inspired. But to accept this as a fact of our times would be too defeatist to tolerate and an insult to those who still view their calling with reverence.

Our criticism of what is here put before young persons at the first great turning point in their lives is thus directed more towards the emphasis rather than the matter. He or she must first have the approach of an artist and the impulse to seek satisfaction in fine building, and no other motive can take its place. It is quite true that he will quickly find that other qualities will be required of him before he can attain that satisfaction, such as to be able to conceive the way in which things must be put securely together, the calculations to show how strong a building must be, the accountancy by which he can assess the liabilities of the client who has put his affairs in trust into his hands: these are things which are often dull in themselves, but which become part of the practical processes through which he is able to practice his art. He will soon come to regard them as a small price to pay for the delights which await him.

Any man, if driven by a high purpose, can make himself sufficient of a mathematician and a business man to fulfil the needs of architecture, but no man, however clever at figures and affairs, can make himself an artist. That is the emphasis which we feel should, but does not, pervade the matter of this handbook. We believe that the personal influence of the service will do much to restore the right balance, and this we salute.

* 'The Architect': No. 16 in the 'Choice of Careers' series issued by the Central Youth Employment Executive, HMSO, price 1s.

Notes of the Week

Architecture and Roads; Downing-street Reconstruction; Oxford's Traffic

PATRICK HORSBRUGH, that considerable internationalist, left London last week, after a short visit, for the United States where in September he takes up the position of Professor of Architecture in the University of Nebraska. Mr. Horsbrugh will first spend a week at Hamilton, Ontario, where he has been planning officer for the past two years and for which he has prepared a roads layout which now only remains to be put into operation.

Nebraska has done well to appoint Horsbrugh, for he is one of the few architects who understand that architectural requirements of the future will be conditioned by traffic considerations—in other words roads must come first. Mr. C. D. Buchanan's appointment to the Ministry of Transport (announced in our last issue) gives reason to hope that the Ministry's long-term planning group, with which Mr. Buchanan will work, has taken the point. Perhaps when his term of professorship in the USA is up, some enlightened authority in this country will make use of Horsbrugh's ideas.

'I must say, Mr. Buchanan, your attitude on motorways is somewhat uncompromising!'

* * *

SOME HUNDRED OR SO of his friends met to say 'au revoir' to Horsbrugh at a party given by Mr. William Whitfield, ARIBA, in Queen's-gate on August 3. Sir Hugh Casson, Dr. Thomas Sharp, Brigadier T. I. Lloyd, Mr. Brian Anstey and Lord Bossom were among the guests, who were shown the film of 'New Barbican' which was made of the scheme prepared between 1954 and 1958 by the New Barbican Group with which Whitfield, Anstey (who made the original proposal for comprehensive development in a letter to 'The Times' in 1954) and Horsbrugh himself were associated. The group took philosophically the City Corporation's decision to appoint other architects while subscribing to the idea put forward by the group; it is a tribute to their advanced thinking that the Barbican development now under way is a first port of call for many foreign town-planners and sociologists.

Downing-street Reconstruction

THE THREE HOUSES in Downing-street which are now to undergo extensive reconstruction, are all that remains of the original square built by Sir George Downing at the end of the 17th century. Number ten itself comprises two houses, the larger of which, overlooking Horse Guards Parade, is older and architecturally more significant. It was incorporated with the smaller house facing Downing-street in the 1730's and later offered by George II to Sir Robert Walpole, who accepted it as the official residence of the First Lord of the Treasury.

Internally all three houses have been patched and altered many times by the Board—later the Office, of Works. Some major alterations were also carried out by leading architects, among whom were Sir Robert Taylor and Sir John Soane. As buildings, of course, the houses are too much of a hybrid to be of outstanding architectural merit, and it is only in certain details that they have any claim for preservation. These include the façades, the Cabinet Room, and the rooms by Soane and Taylor. Undoubtedly it is the historic aspect that is of greatest significance, and this alone is perhaps adequate reason for their preservation.

* * *

THAT THE STRUCTURE needs urgent attention is shown by the extensive cracks in the walls and ceilings, and the serious movement of the main staircase caused by subsidence. Shoring, constructed on the ground floor as a war-time precaution, has, after fifteen years, become so much a part of the structure that if it were removed there is a very real danger that parts of the first-floor, which contains the Cabinet Room, would collapse. Mr. Raymond Erith, ARA, in his plans for reconstruction, does not propose any alterations to the main disposition of the rooms. His aim is to improve the building by working within its established framework and to improve the horizontal and vertical communications. He will increase the usable accommodation by as much as 50 per cent, let in more light, and generally tidy up the rather piecemeal additions of the past 100 years. No. 12 will be reconstructed to its original height and treated as extensions to Nos. 10 and 11.

The cost of reconstruction of the Downing-street houses, which will take two years, is estimated at about £½m. with a further £¾m. for the rebuilding of the Old Treasury. This latter will be to the design of the Chief Architect's Division of the Ministry of Works. The contractors for both schemes are John Mowlem and Co. Ltd. who will be able to call on the resources of their subsidiary, Rattee and Kett, who are specialists in this field.

Drawings of the proposals for both schemes were published in 'The Builder' of December 18, 1959.

Oxford's Traffic

LORD DAVID CECIL'S PROPOSAL for making the central area of Oxford into a trafficless 'precinct' (put forward in a letter to 'The Times' on Tuesday) will command a good deal of support. The city, says Lord David, 'is one of the few supreme monuments of European history and civilisation, the English equivalent of Florence or Venice. But the increase of modern traffic is threatening rapidly and completely to destroy its character and integrity.' He adds that the various proposals about roads do not seem likely to relieve traffic for long and that at the present rate of traffic expansion any new roads will soon be as clogged as the old.

This Parkinsonian view is shared by many who see, with Lord David, the ruin of the ancient without benefit to the modern. His proposal that the area bounded by the Parks on the north, by the river on the east and south, and by St. Aldate's, the Cornmarket and St. Giles on the west should be turned into an enclosed precinct certainly demands consideration. The chief object of sacrifice must surely be that the ends sought shall be worth the price.

'Criticisms of School Design'

Mr. Pooley Replies for Buckinghamshire

THE CRITICISMS of some current school designs made by Sir Frank Markham, MP for Buckingham, in the House of Commons recently (reported in 'The Builder' of July 29) have drawn a reply from the Buckinghamshire County Architect, Mr. Fred Pooley, FRIBA, FRICS, AMTPI, some of whose plans came under Sir Frank's fire.

One such was Wing secondary modern school, of which Sir Frank said: 'Wing is redeemed by a lovely sylvan setting but this and other buildings show regularity run riot, with an excessive amount of glazing and nothing to break the severity of design except an ugly chimney at Wolverton or an eccentric superstructure like a hat box at Winslow.'

In his speech, Sir Frank also attacked the Ministry of Education's 'most iniquitous Bulletin No. 33: the story of post-war school building.' 'This,' he declared, 'is wrongly named and should be entitled "Instructions to School Architects" for it has become almost their Bible. In it the Ministry makes clear that it expects architects to eschew in their school buildings what may be called traditional ornament. In other words, it recommends and advocates the starkest simplicity in design.' Sir Frank ended by asking the Minister of Education 'to withdraw Bulletin No. 33, go to the Royal Fine Art Commission, get it to look at these schools and report.' We commented on this in 'The Builder' of August 4.

Mr. Pooley now sends us a photograph of the Wing school and some factual notes on which he is content to let Sir Frank Markham's comment rest.

The actual building cost of the Wing school was £6,700 below the maximum the Ministry of Education would have been prepared to approve, and the net cost was 65s. 7d. per ft. super. It is wrong to say that any of the three ingredients of its architecture, i.e., planning, construction or æsthetic judgment were dictated by Ministry of Education Cost Control or by Bulletin 33.

The school is one of a series in a design programme aimed at getting enlightened architecture with traditional building construction. It is an alternative approach to a proprietary prefabricated system or a concrete frame and concrete panels cladding. Apart from the steel frame to the gymnasium/assembly hall, the building is constructed in load-bearing brickwork with pre-stressed concrete frames. The bricks are London yellow stocks; exposed concrete edge beams are cased with natural blue slate. The infill panels are enamelled metal on an asbestos backing. The timber frames are softwood painted.

The school has been planned and designed to fit this particular site and the plan is based on an internal courtyard with teaching spaces kept away from the noisier element. Within the relatively low building cost it has been possible to find money for maple strip flooring in the assembly hall, wood blocks in classrooms, and linoleum and cork tiling in the library and administration block, whilst the kitchen and toilets are tiled to full height. All joinery fittings in the laboratory, etc., many of which are included in the net cost, are in hardwood.

Wing Secondary Modern School, for Bucks Education Committee. Fred Pooley, FRIBA, county architect (see this page).

Designing Leicestershire's Schools

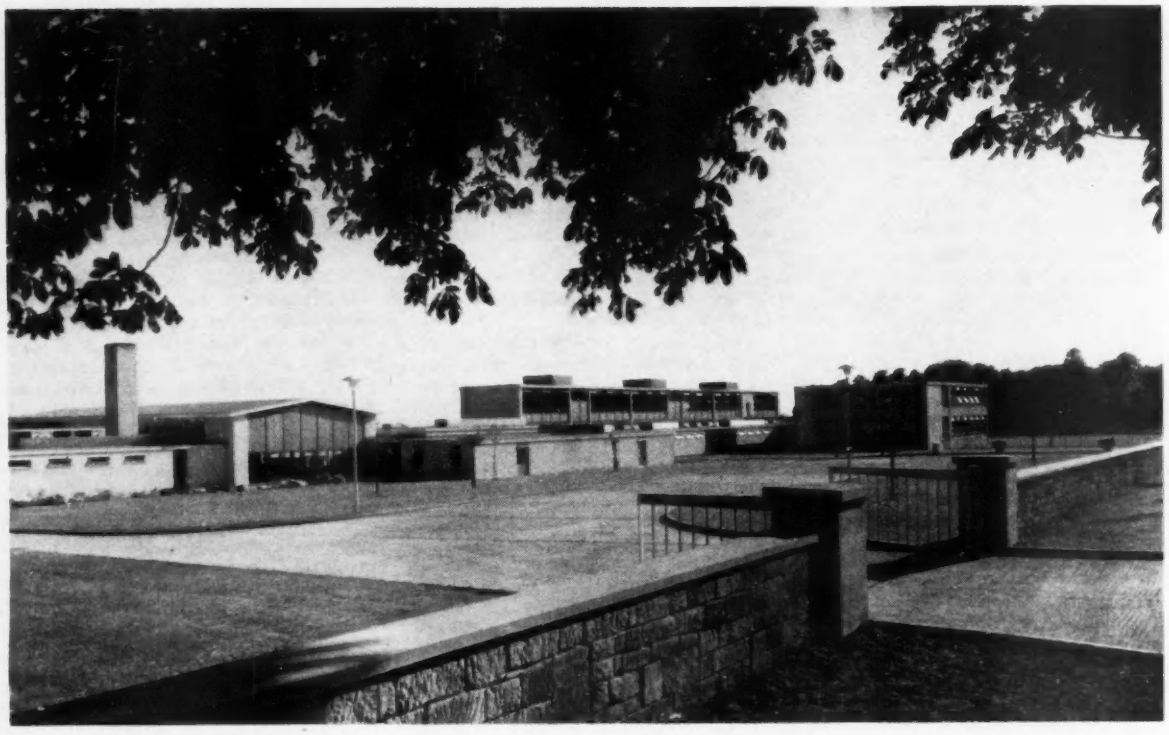
AT A MEETING of the Leicestershire County Council on July 26, a suggestion that a special department be set up for architects' work for the County Education Committee was made by MR. A. VESTY. 'I am quite sure this council could save an enormous amount of money by having some, or most, of the work done by their own officers,' he said.

ALDERMAN WINSER replied that it was almost impossible at present to obtain the services of competent architectural assistants, and his committee had agreed to bring in private architects. 'It is felt that the Council will be better served by private architects than by trying to establish a separate department,' he added.

Combe Down Secondary School, Bath

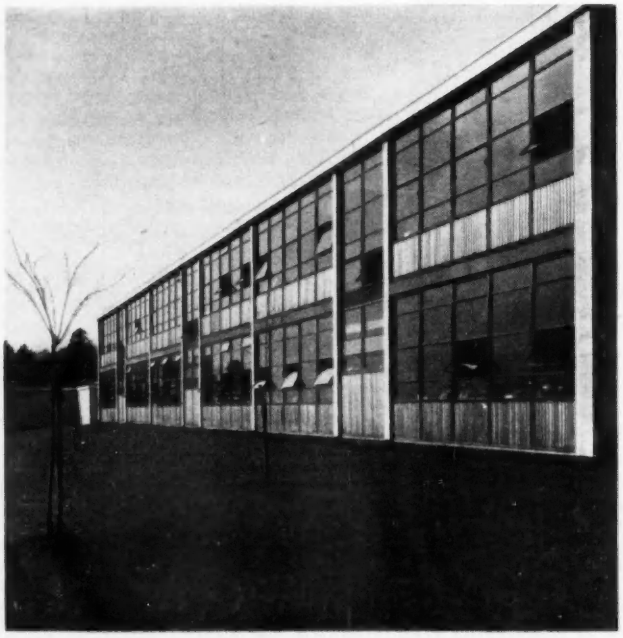
HOWARD V. LOBB & PARTNERS, architects

PLUMMER & HOCKEY, general contractors



Reading from left to right: boiler house, assembly hall, classrooms, and science block

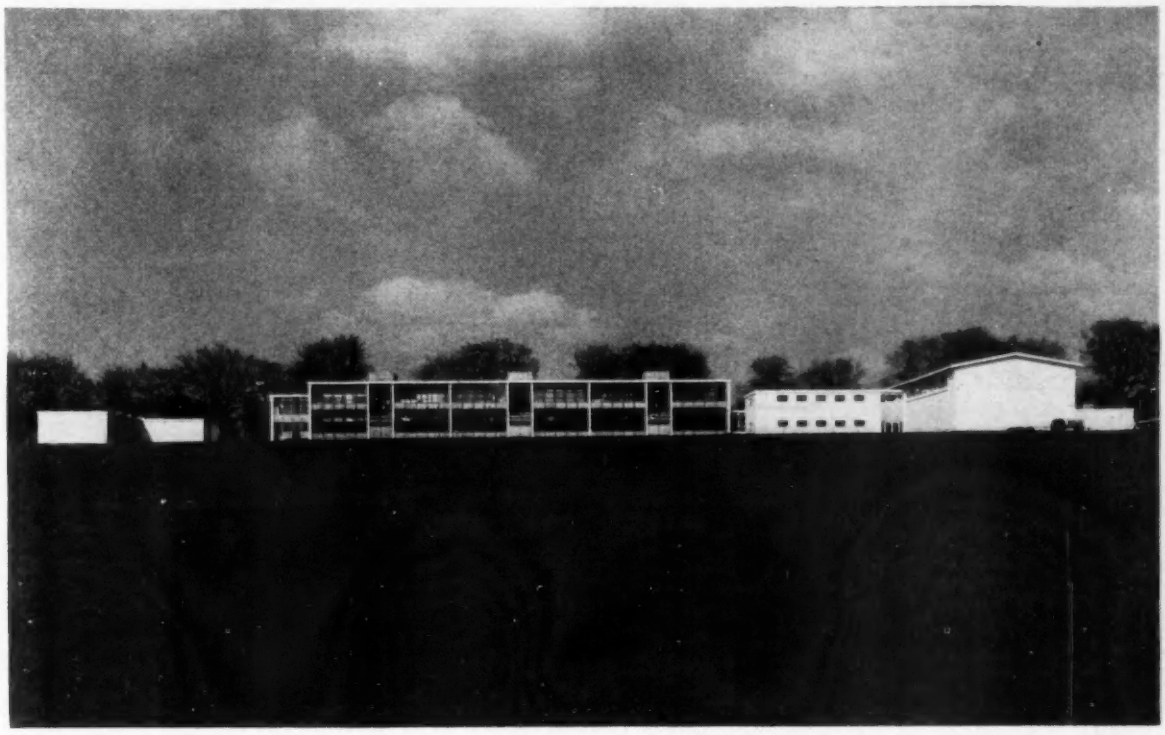
The classroom block has crosswall construction



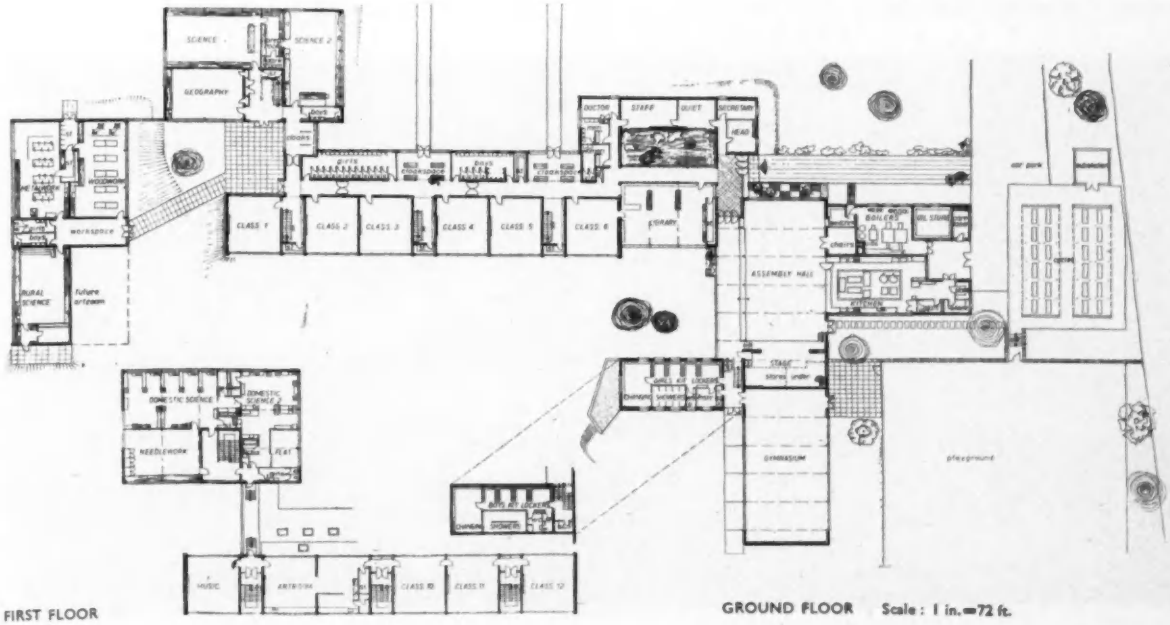
IN THE DESIGN OF THIS SCHOOL, more attention has been given than usual to its setting in a site of outstanding landscape value. For this reason, the building has been kept long and low and the massing of the various parts has been carefully considered together with the numerous smaller details, such as walling and gates which make the complete picture. For the same reason, too, the materials and colours used externally have been selected to accord with the landscape and Bath stone has been used extensively.

It is a mixed secondary modern school for 480 pupils in the first stage, with a future extension of two classroom units to complete the school. The accommodation includes 10 classrooms, 2 science and a rural science room, and various handicraft rooms in addition to the normal requirements of assembly hall, gymnasium and ancillary accommodation. This accommodation has been disposed in four separate units, namely one block containing the assembly hall, gymnasium, kitchen and boiler house; a classroom block proper; a science block with the domestic science and needlework rooms on the first floor; and a practical block isolated from the others for reasons of noise.

The classroom block is constructed with load bearing brick walls, but all other buildings have light steel framing. This type of construction has proved, as intended, to be most economical, as the tender showed a saving of over £11,000 on the Ministry of Education's normal allowance for a school of this size, the value of the contract being £136,778. Work commenced in April, 1956, and was completed to time at the end of



Practical block, classrooms, and gymnasium from the playing fields



FIRST FLOOR

GROUND FLOOR Scale: 1 in.=72 ft.

Assembly hall and open corridor

Assembly hall stage, from corridor

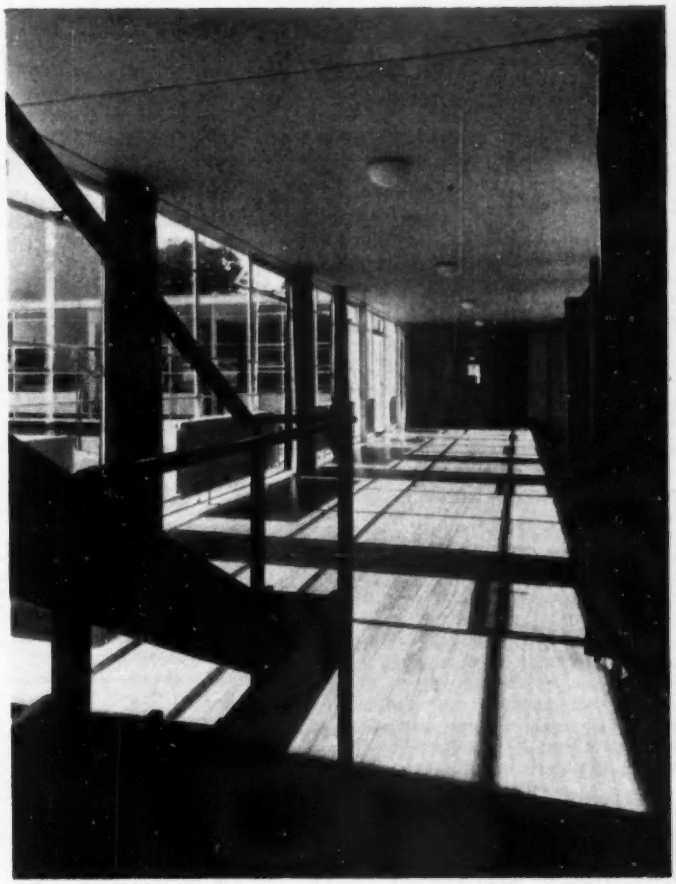
Gymnasium

March, 1958, although it was possible by the co-operation of the contractor to make available the majority of the school for the January term. The landscaping work was carefully considered in relation to the scheme and the aim has been to humanise the building by intimate planting close to it. The playing fields include a cricket square, two football and two hockey pitches.

The library corridor bears an enlarged photo of the City of Bath, and the assembly hall curtains, designed by Gerald Holtom, illustrate the atmosphere of the city, for whose Education Committee the school has been built.

Sub-Contractors & Suppliers:

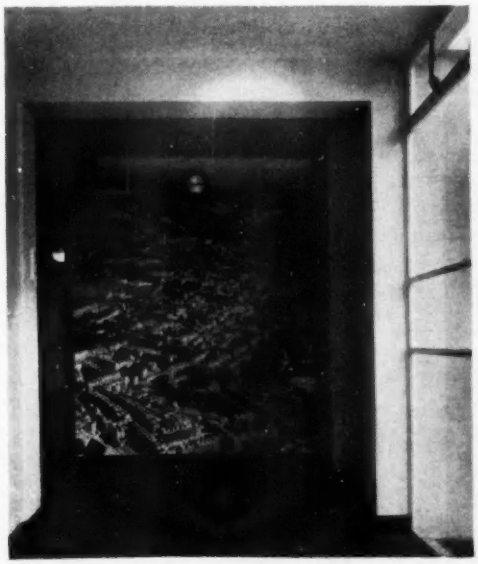
Structural steelwork: H. J. Horswell & Son Ltd.; *heating, hot and cold water services, etc.:* Rosser & Russell Ltd.; *electrical installation:* Troughton & Young Ltd.; *felt roofing:* Ragusa Asphalte Paving Co. Ltd.; *wood block flooring:* Philip Flooring Co. Ltd.; *metal windows:* The Crittall Manufacturing Co. Ltd.; *thermoplastic tiles:* Marley Tile Co. Ltd.; *Marleyrail and vinyl skirting:* Marley Tile Co. Ltd.; *slate cills and fascias:* Bow Slate & Enamel Co. Ltd.; *Bath stone facings:* Bath & Portland Stone Firms Ltd.; *granolithic paving:* Stuart's Granolithic Co. Ltd.; *vermiculite spray:* Turners Asbestos Cement Co. Ltd.; *plastic wall finish:* Plastic Surfaces Ltd.; *sanitary fittings:* W. N. Froy & Sons Ltd.; *roller shutters:* Roller Shutters Ltd.; *terrazzo partitions:* Areanum Terrazzo & Stone Co. Ltd.; *stage lighting:* Strand Electric & Engineering Co. Ltd.; *cloakroom equipment:* A. J. Binns Ltd.; *blinds:* London Blinds Ltd.; *staircase balustrading, entrance gates:* St. Thomas Metalworks Ltd.; *joinery fittings:* Woodberry Haines & Co. Ltd.; *gymnasium fittings:* Spencer, Heath & George Ltd.; *reinforcement:* Square Grip Reinforcement Co. Ltd.; *prestressed floors and roofs:* Costain Concrete Co. Ltd.; *ironmongery:* Yannedis & Co. Ltd.; *Trofdek roofing:* H. Newsum Sons & Co. Ltd.; *domelights:* Williaam J. Cox Ltd.; *upstand ventilating curbs:* Greenwood's & Airvac Ventilating Co. Ltd.; *tarmacadam paving:* Durnford Construction Co. Ltd.; *spiral staircase:* Gardiner Sons & Co. Ltd.; *sliding door and track apparatus store:* Esavian Ltd.; *landscaping:* Oldfield Nurseries.



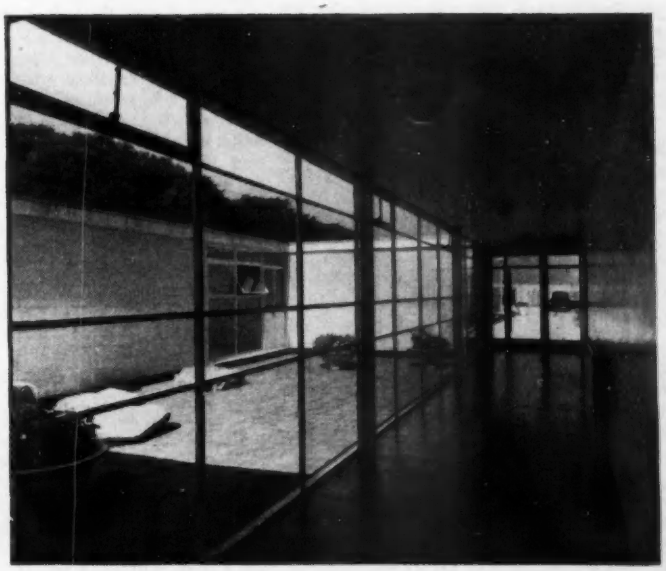
Corridor and stair to changing rooms

Combe Down Secondary School

Enlarged photo-mural of the City of Bath



Internal courtyard adjacent to library



Architectural Education

Some Personal Reflections on the Oxford Conference

BY GEORGE GRENFELL BAINES, OBE, ARIBA

The following paper on 'Architectural Education' was written by Mr. George Grenfell Baines, OBE, ARIBA, AMTPI, shortly after the RIBA Conference on Architectural Education, which was held at Oxford from April 11 to 13, 1958, and has not been published before. At the time of writing Mr. Grenfell Baines was on the committee responsible for organising the Conference.

ARCHITECTURAL EDUCATION involves many matters, but two discussed at Oxford seem to be of immediate importance to the profession. The first is intake, and the second what kind of education does the potential architect need? Intake is concerned with community needs, while 'kind of education' basically involves industrial and individual needs.

To deal adequately with intake can neither be easy nor quick. A strong statistical survey must be made, wider and deeper than the figures supplied to the Conference. For example, comparisons with other countries can only be useful when the architect : designed building work, and architect : all building work proportions are known. Then, as at least a third of the building industry in this country is engaged on maintenance, we should know first how much of this work needs designer attention, and how much gets it—we then require corresponding statistics for other countries.

Obviously a country that is not building many new buildings will not need many architects, yet it may have a larger population than one which is building furiously and constantly demanding design services. Some countries are 'old' and possess a wealth of good buildings—their population may be almost static; other countries may be so preoccupied with defence or bullfighting that the margin of resources they are prepared to devote to new building bears no relation to that of a country with a cold climate and a social conscience. One could continue, but in short it is not enough to base an intake policy on the architect population ratio for other countries or even on whether we think the individual architect earns enough.

Pressure of Work

We are told that Great Britain has more architects per head of population than most other countries, yet speaking for our office and of what I hear from most of my architect acquaintances, we cannot get enough men to do the work in the time it is wanted. Intolerable pressure was caused by the war, but even now, 14 years after, the pressure still seems almost intolerable.

All this is not to dismiss the question as too difficult, but to clarify its long-term nature and the need for deeper research before any definite policy to expand or contract is decided upon.

The most immediate, though indirect, step to a contraction policy is that of raising the standard of education at intake level. There may be reservations about this—certainly it cannot be considered a guarantee of future quality, but at least the step may be tried as an experiment. Meanwhile the most extensive inquiries should be made to provide evidence from those teachers whose experience has given them full opportunity of noting how students coming to the same school from 'O' and 'A' levels have fared.

Different methods of working could obviously affect the architect: building ratio—every practising architect knows that for one reason or another the efforts of different men can result in the production of more or less building in the same time of architectural effort, and while it is true that quantity alone is no measure, we in our practice have seen such wide gaps in quantitative performance as to warrant intensive research into methods —which we are still conducting.

Individual Attitudes

This introduces the second matter—kind of education—as it affects the attitude of the individual architect entering the field of practice.

One of the greatest confusions which seems to affect not only the new graduate but the profession at large, lies in interpreting the nature of design. I could not pretend to follow the whole of the Oxford discussions on theory of design, but it might be that absence of a theory of design is partly due to confusion in the concept of its nature.

To many of the school-trained men just entering our office (practically the whole of the 32 architects working with us are school-trained) 'design' is a matter closely associated with graphics and often goes no deeper than the paper on which the exercise takes place.

In trying to decide how much a building owes to drawing and how much to thinking I have many times been forced to conclude that if only architects could think as well as they could produce board and tee-square drawings, we might not only have better buildings, but a more appreciative public.

If a moral is to be drawn it is that beautiful drawing is no guarantee of good design, and this raises the question, how much does practice in drawing develop a capacity to think comprehensively? For if design is not comprehensive then it is out of balance and on most of the occasions our services are needed, to be out of balance is to fail.

To me the nature of design is balance —the highest possible balance of suitability for purpose, soundness of structure, economics and site. It follows that if all the positive characteristics of these individual factors are sought out unselfconsciously and synthesised with skill to the highest degree, a design of significant individuality and beauty will emerge. 'Truth is Beauty.'

Where does this bring one in thinking of the 'kind' of architectural education we need? It has brought me to concluding that the student is allowed to use up far too much of his time producing drawings in the belief that he is designing buildings. I did it myself at school and it was wholly delightful—that is the trouble; undue indulgence in the delights of draughtsmanship can turn the exercise to craftsmanship and when this happens design goes out and the student is halted on his way to being an architect—not only halted, for when drawing becomes the end he has turned off and may therefore never arrive.

The Factors of Design

Hard experience shows that one doesn't 'design' a building without knowing a great deal about the factors of design, sufficient to be able to evaluate them simultaneously to the point of distilling their essence.

It would obviously be foolish of any practitioner to expect the newly graduated architect to be able to 'design' in this sense—but it is obviously even more foolish to develop the belief in a student that because he has almost perfected an ability to produce graphic design which bears a resemblence to a building, he can 'ipso facto' design a building. Yet that is what most of them believe. Is it really surprising therefore that in spite of the brave spectacular shows on the studio walls at year end, we still see very few really good buildings? Not a bit. Nor is it surprising to hear—when inquiring at school into this deficiency on constructural thinking or that default of functional imagination or this complete ignoring of economics, or site—'we have not enough time.'

Were the nature of building design to be fully understood, it could be seen immediately that such matters as arranging spaces for purpose, elements for construction and the whole for economy to suit the site (even the underground nature of which might characterise the design) must be fully appreciated and understood before an architect can start to design. This being so, it must be admitted that to teach architects in a way that leads them to believe they are designing when they produce a good looking drawing in their first year is, to put it simply and mildly, leading them astray, but worse than that, it is leading the schools astray!

There *is* time for the staff to teach, and for the student effectively to absorb, the deeper foundations of basic knowledge required to lead on to the most imaginative designs. And the remedy in a few words is 'take it out of drawing that is no better at best than graphic design.' But as architecture is so much a visual matter and drawing is so effective a means of communication as well as such an attractive pursuit, it is necessary to be very careful when making adjustments of time in the school curriculum.

Only 'natural' methods will be

successful, for example, an enlivening and extension of the essential studies in structure, function and economics to the point where 'there is no time' for elaborate board and tee-square drawing, and strong encouragement to sketch and photograph people, buildings and objects in spare time. As in our office we are trying to cut out board and tee-square work by using faintly squared paper (in a way a mechanisation of drawing), it seems almost practicable now to eliminate the tee-square and most drawing instruments in the schools. It seems necessary to help students to understand the depth of imaginative thinking needed to visualise functions, the flow of structural stresses, of air currents, of the effects of wind and weather and industrial pollution outside a building, and to appreciate that all these demand much more of the imagination than producing patterns on paper, arresting and pretty though they might be.

It seems necessary to help students to understand that while ideas matter in design, the best ideas for a building design arise naturally out of the conditions and not merely out of a selfconscious seeking in externals. Only in this way is it possible to develop the attitude that sees wholehearted devotion to the matters of the job in hand as a desirable end in itself and not merely a means (often seemingly disagreeable) to the end of a monument to the designer (so-called). Only in this way will it be possible to develop architects capable of rising above their circumstances, of making a whole greater than the sum of the parts because having acquired a firm grasp they can handle them.

Basic Knowledge

If the entrance level is raised it follows that many boys will enter schools of architecture having a good knowledge of the mathematics and sciences necessary to a full understanding of structure and materials; then, immediately after entry, is the time to extend and strengthen these basic knowledges.

The student will hardly ever be in a better position to benefit from such further training. Knowledge of the nature and behaviour of heat, light and sound, and of chemical reactions are all present, awaiting extension and application—it seems folly to postpone or curtail this in the pursuit, however delightful or speculatively developing, of graphic design. It may be going too far but I would put encouragement to develop an ability to play the piano as high as wielding a pencil in the process of developing taste and sensibility in the student's early years; certainly the ability to use a camera, to discriminate in choice of dress, objects and music, are all necessary attributes to foster in the beginning, as complementary elements in the main diet of acquiring the know-how necessary to design in the sense already described.

Some Conclusions

Once it is accepted that architecture like all creative arts will derive its best inspiration from a selfless devotion to those human and material aspects peculiar to the time and place of its creation, which is in brief a statement of the nature of design, then the nature of the designer and the nature of his training becomes clear.

To recapitulate and develop what has been said, the architect needs a calmness and poise of mind that can work and wait for beauty, not pursue it superficially and vainly: a capacity to visualise and understand with sympathy the activities of people—this implies also a capacity to respect the past activities of people, particularly the designers and builders (often the same persons) of past ages. He needs:

A capacity to visualise the flow of stresses within all the elements and parts of a building right down to a door handle and the capacity of all these parts, where they can, to act together.

A capacity to visualise the actions of wind and weather on exterior edges and surfaces, a capacity to visualise the action of cleaning, maintenance, and actual use, on interior edges and surfaces.

A capacity to visualise the effects of air movement, radiant and other forms of heat, of light and sound, as they affect the physical comfort of the users.

A capacity to assess economic priorities and so to control, within specified limits, the disposition of finance.

A knowledge of the chemical composition and physical nature of materials.

A knowledge of the possibilities of tools and machines that form, assemble, and erect, and of the men who operate them.

A capacity to speak and to write clearly, to draw and to use a camera, in short to communicate.

With all these a capacity to think comprehensively, and a positive passion to bring to the highest possible conclusion simultaneously *all* the considerations that are conscientiously seen to be valid.

Such is the nature of the designer as reflected by the whole, balanced nature of design; thus the training most likely to start such a designer on a way calculated to help him to continue towards perfecting and fulfilling his role will 'ipso facto' be a whole, balanced training.

Experience and Learning

Where it is natural to ask, do we get this now? Judging by the uneven concentration that is necessary in the practice to help new graduates towards full usefulness and full expression, the answer is 'No!' But the reason is not far to seek. As experience is the only teacher, whether it be the experience of contact with a human teacher who communicates experience, or direct personal contact with events, it follows that the more vivid the contact with actual experience and the more powerful the impact, the more likely is the student, be he young or old, beginner or graduate, to learn. And it is physically and practically almost impossible for the schools to provide the necessary degree of actual personal experience of those matters already described which make up that life the potential architect is destined to serve.

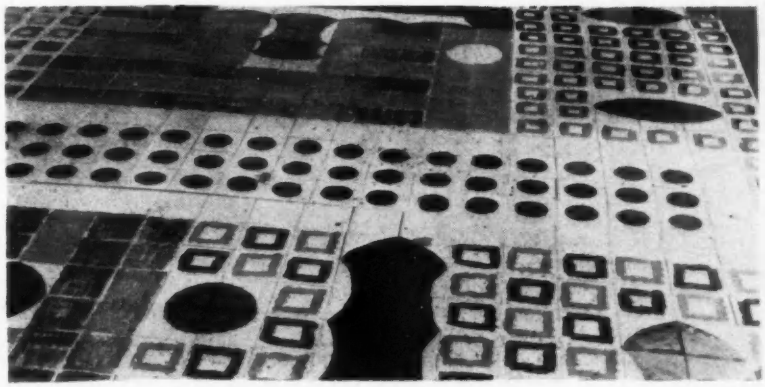
The school can give all the communicated experience necessary via lectures, films, demonstrations, and other recognised and still developing forms of relating experience, but learning by the process of actually encountering experience in person can only be achieved in that sphere where the responsibilities for success or failure stand out clear and immediate, that is in the field of practice.

Ideally the whole working world should be a university, and one day, thanks to the universities, it may be. There will then be no need for universities as we know them today, but all the need in the world for the universities which the wisdom of that day will deem necessary. But not to divert.

As the universities have been pouring forth their better trained, more liberally minded (generally speaking) products into the world of practice, they have been revolutionising that world as a place where the sharp and compelling voice of experience can be controlled and interpreted in the interests of developing the inexperienced. Industry, commerce and profession are all better, more enlightened and sympathetic places to learn than ever they have been since the industrial revolution began—perhaps than ever they were, because much of today's industrial, commercial and professional activity

(concluded on page 275)

Section of a tile mural designed for Basildon Town Centre by Mr. William Gordon. The mural, largest ever made in Great Britain, measures 310 ft. by 13 ft., and uses tiles made by Carter Tiles, Ltd., of Poole

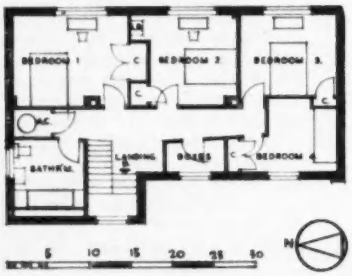


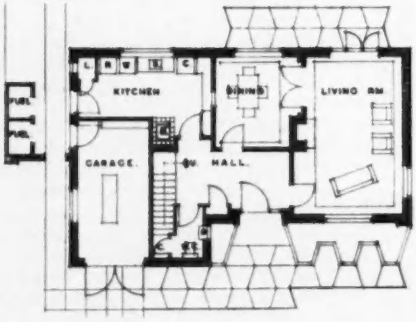
Private House at Cobham, Surrey

EDWARD BANKS, FRIBA, and REGINALD P. MILLS, ARIBA, associated architects

F. H. NORRIS, general contractor

West elevation and main frontage from the road





THE HOUSE is situated in the pleasant residential area of Fairmile. Built on a 60-ft. plot with the front towards the west, the house has an area of 1,500 sq. ft. plus garage.

Traditional loadbearing construction is employed, with 11 in. facing brick cavity walls. The roof, pitched at 30 deg., is covered with dun-coloured double-Roman tiles.

The living room has windows on the south and west sides, with casement doors to the rear garden. A convector fireplace is installed, with a surround of Derbyshire fossil marble. A dining area leads off this room, which can be isolated by dividing doors. The kitchen has the various fittings built-in, and the boiler provides hot water for domestic use and space heating.

Four double bedrooms are provided at first floor level, each fitted with dressing tables.

Internally, plaster walls are finished with emulsion paint or wall-papered. Floors are wood-block in the living rooms and hall, thermo-plastic tiles in the kitchen, and boarding on the first floor. The contract cost for the house was £4,000, in 1956.

Sub-Contractors & Suppliers:

Facing bricks: W. T. Lamb & Sons Ltd.; The Gatwick Brick Co.; *roofing:* Roberts Adlard & Co. Ltd.; *flooring:* R. W. Brooke & Co.; *electrical installation:* J. G. Sandell & Son; *sanitary fittings:* W. N. Froy & Sons Ltd.; *fireplace:* J. Whitehead & Sons Ltd.; *fire:* Grange Camelon Iron Co.; *ironmongery:* H. & C. Davis & Co.; *joinery:* E. Longhurst & Sons Ltd.; The Downs Joinery Co.; *ironwork:* C. Canfield & Son; *paint:* The Leyland Paint Co.; *boiler:* The Aga Heat Ltd.

is actually controlled by university trained people. Is it conceivable that all these people have lost or forgotten the liberal and examining atmosphere of their university? If it is, then the admission is a terrible indictment of their training and the institution in which they received it.

There was a time in building design, historically speaking only yesterday, when far too many designers were trained almost entirely in the field of practice—the profession of that day failed itself by failing to perceive the true nature of design and so to practise it and properly develop its students.

Acquiring Public Respect

Forty years ago there was a desperate need for new fields and methods of training—we today must be grateful to the Schools of Architecture, some of them based on universities, some on great art and technical institutions—for their achievement of re-establishing a more liberal and inquiring outlook on design. It is not difficult to see that without them little or no advances in design from the 'revivalist' buildings of the 19th Century could have emerged; indeed the Schools of Architecture can justly claim to have brought the profession back to the threshold of public respect. The next step, naturally, is to enter, as already have architects in other countries. It was significant to hear at the Oxford Conference that in two of these countries education had developed into a pattern of combined teaching and practice.

Just as the profession is ready to step forward into public respect, it is suggested that now is the time for the schools to step forward into the field of practice as an extension and development of their function and sphere of influence.

This is not merely a matter of coincidence, it is in fact one of sharp necessity. The engineering and chemical industries have already realised it, designing combined courses, enjoying the doubtful title of 'sandwich' (the word conjures too many conflicting recollections), but name apart, the practice is relevant and points the way for building.

As the Oxford Report states, 'the development of combined training should be characterised by experiment.' It would wholly jeopardise the adoption of the principle to prolong discussion on a suitable pattern for these courses, even were it to be thought that the perfect pattern exists. For there is nothing new about training in school and office. As shown at Oxford, over half of the students now training are for various reasons working in both school and office. What must be new about future combined courses is that they must be set up by already recognised full-time schools or comparable schools or consortia of schools, and that there should be formal links between schools and the offices where the students are to be placed.

'A College of Teachers'

This implies the formation of two working committees which will be responsible for establishing the course and for maintaining standards of training in school and office. The first would be a practising architect-teacher association, the second a 'college of teachers' drawn from the staffs of the schools composing the consortium which is to provide the course.

It must be clearly understood by all concerned that while the course is a combined course and its conduct is therefore a matter of combined effort in which all views of a constructive nature must be carefully considered, the school must bear the responsibility and the privileges of directing the course in both school and office.

Obviously the influence over work in the office must be of an advisory nature, but once the college of teachers has taken the trouble to lay down the outlines of training by experience in the office, the practising architects, in official and private practice alike, must realise that apart from any public spiritedness on their part, it is in the naked interest of investment in their own future that they must accept their new responsibilities and literally rededicate themselves to teaching.

This implies a readiness to see that the work of the student in the office is in nature and degree sympathetically related to his studies. It further implies a willingness to take interest in the school work of the student by calling at the school or inspecting school work in the office and, when felt necessary, commenting upon it to the staff. This requires on the part of the school a readiness to facilitate periodic inspections by practising architects through small exhibitions, the managing and mounting of which would be conceived as exercises for the students in developing taste and the power to communicate. These periodic inspections should be essentially social, as well as academic occasions—implying cups of tea at least.

For their part, the schools must realise that if bare accommodation for a student is costly to the office, the time of principals and senior staff is even more costly, and the whole organisation must be able to earn a living or justify its existence to an authority. This implies a readiness to bear with the problems of time and space inherent in the working world, by giving ample notice of placings and flexible outlines for the desired nature and scope of training, but above all things to get rid of the idea that the imagination and spirit of their precious charges are likely to suffer, to be soiled, or to wilt, by contact with 'sordid practice.'

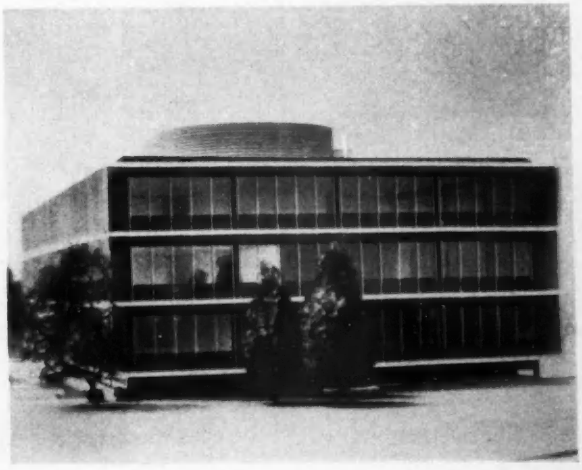
All would agree that mistaken prejudices are evenly distributed between school and office, and in any event the school whose product appears to have been 'spoiled' by training in practice stands to be condemned along with the office.

This paper may conclude with extracts from a leader in the 'Manchester Guardian' of July 15, 1958, discussing training for management generally, and quoting with approval part of a paper by a university professor. The leader goes on:

> 'The scientific study of management techniques, he maintains, is both possible and necessary. All that impedes it is an arbitrary divorce between theory and practice, which leads to a snobbish habit of looking down on practice as somehow inferior to theory, and to the common assumption that management — being "practical" — cannot be studied theoretically.
>
> 'He elaborates no remedy, but he does hint that he thinks university courses could be broadened to include the study of management. Before this happens the older universities at least, will probably have to suffer an intellectual revolution.'

Why the universities should be called on to 'suffer' an intellectual revolution puzzles me! I prefer to think our profession and our schools of architecture would not suffer but enjoy a fundamental re-think on training.

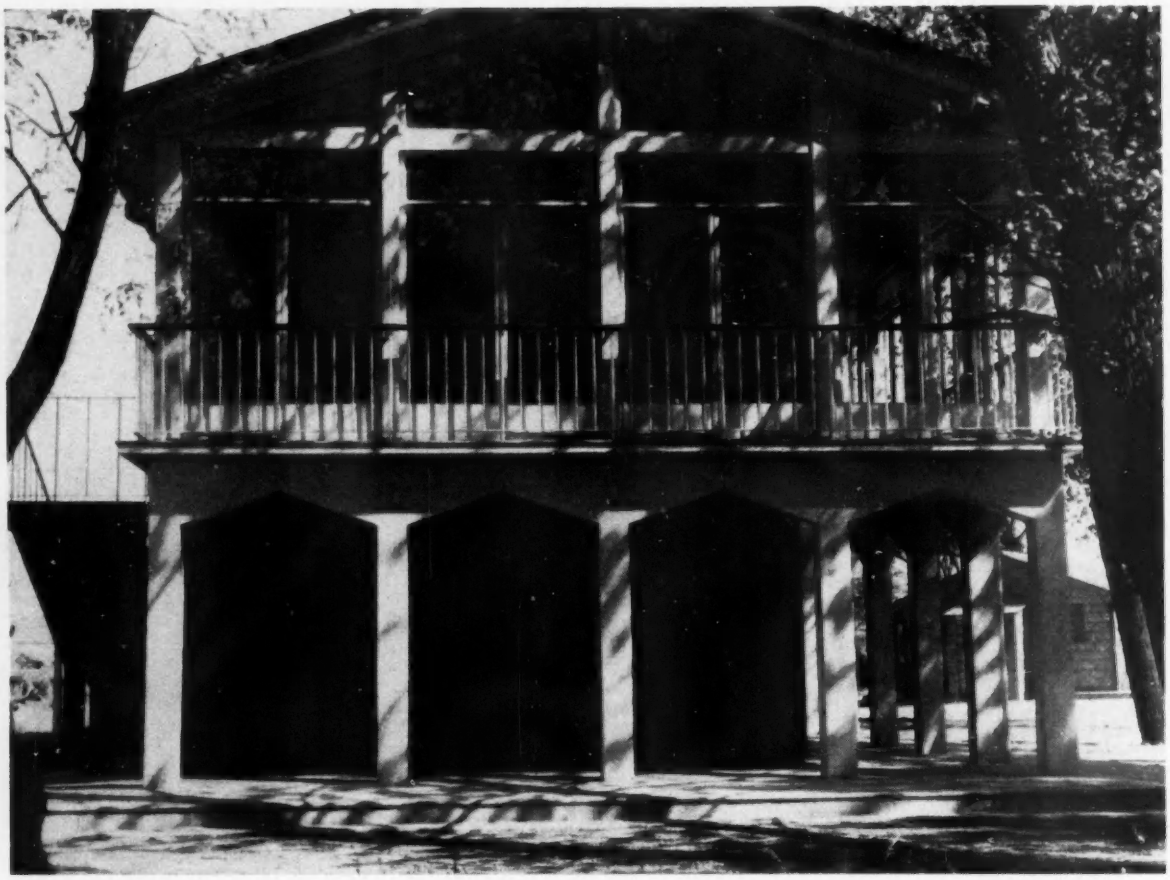
Indeed I would go further—Is it beyond the bounds of possibility that, economic material differences apart, much of the social bitterness of today, and certainly of the past, is due to wrong evaluation of theory and practice begun in early education, and actually amplified during further training? So finally, would it be unduly optimistic to hope that architects, in working out their own problems, might unconsciously set a pattern to inspire and guide their fellow citizens at large?



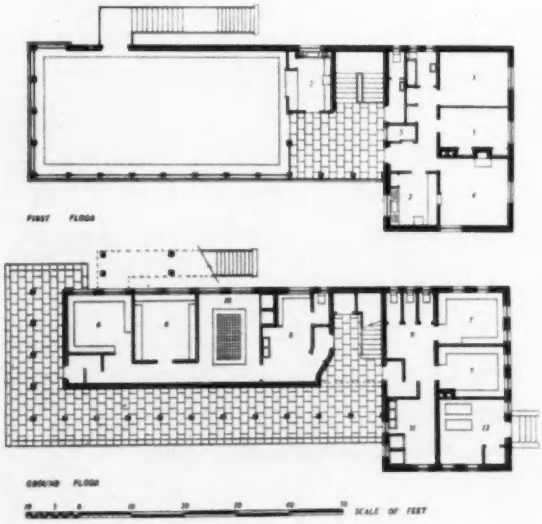
The new head office building for the Ontario Hospital Association at North York, Toronto, is now under construction by Taylor Woodrow (Canada) Ltd. who have been awarded the £325,000 contract. Of three storeys with basement garaging about 50 cars, the building has a steel structural frame and metal curtain walling. Architects are Peter Dickinson Associates and engineers Giffels & Vallet of Canada, Ltd.

Sports Pavilion, Essex

STRATTON DAVIS & YATES, architects
COLLINS & MASON, consulting engineers
SAMUEL WILLIAMS & SONS LTD., general contractors



First floor canteen oversailing the changing rooms



KEY: 1 *Canteen,* 2 *Kitchen,* 3 *Bedrooms,* 4 *Living Room,* 5 *Fuel Store,* 6 *Men's Changing Rooms,* 7 *Women's Changing Rooms,* 8 *Men's Toilet,* 9 *Women's Toilet,* 10 *Men's Showers and Plunge Bath,* 11 *Women's Showers,* 12 *Boiler House.*

THE PAVILION was built for J. John Masters & Co. Ltd., in River Road, Barking. The accommodation comprises men's and women's changing rooms and showers, oil fired hot water and central heating boilers on the ground floor, with a canteen, small kitchen and caretaker's flat above.

The ground floor rooms are heated by a thermostatically controlled low pressure hot water system operating through copper floor coils embedded in the floor screed. The canteen has a forced flow fan convector.

Because the site is on made-up ground, reinforced concrete shell piling was adopted for the foundations. The canteen roof is supported on steel portal frames and covered in patent copper

Main verandah and timber-clad domestic wing

General view showing effect of the pointed arches

roofing. The walls are of 11 in. cavity brick construction clad with western red cedar ship-lap boarding.

The floor of the canteen, which is intended for dancing, is of patent laminated timber construction and laid on sand over a concrete sub-floor.

Trees are extremely rare in this neighbourhood, and as the site contained several mature specimens as many as possible were preserved.

Sub-Contractors & Suppliers:

Patent copper roofing: Broderick Insulated Structures Ltd.; *structural steelwork:* A. W. Parrish & Son; *heating, hot water and plumbing:* G. N. Haden & Sons Ltd.; *foundation piles:* Wests Piling Construction Co. Ltd.; *metal windows:* The Crittall Manufacturing Co. Ltd.; *terrazzo floors:* Alan Milne, Ltd.; *patent Kähr laminated timber floors:* Masters & Andren Ltd.; *roller shutters:* Roller Shutters Ltd.

Aircraft Hangar, Gatwick

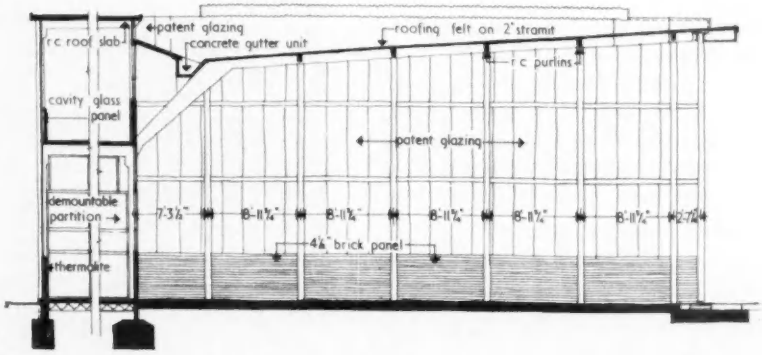
CLIVE PASCALL, PETER WATSON & ASSOCIATES, architects

HOWARD FARROW LTD., general contractor

The hangar roof is supported by a series of precast concrete cantilever frames, arranged in pairs and extending 58 ft. to the front fascia. The structure is counterbalanced by a two-storey workshop and office annex at the rear

THIS HANGAR is the second to be built for Transair Ltd., at Gatwick Airport. It was decided that the new building should be complementary in function to the existing facilities, serving as a 'nose' hangar for Viscount aircraft and a complete hangar for small aircraft of the Dove and Heron type.

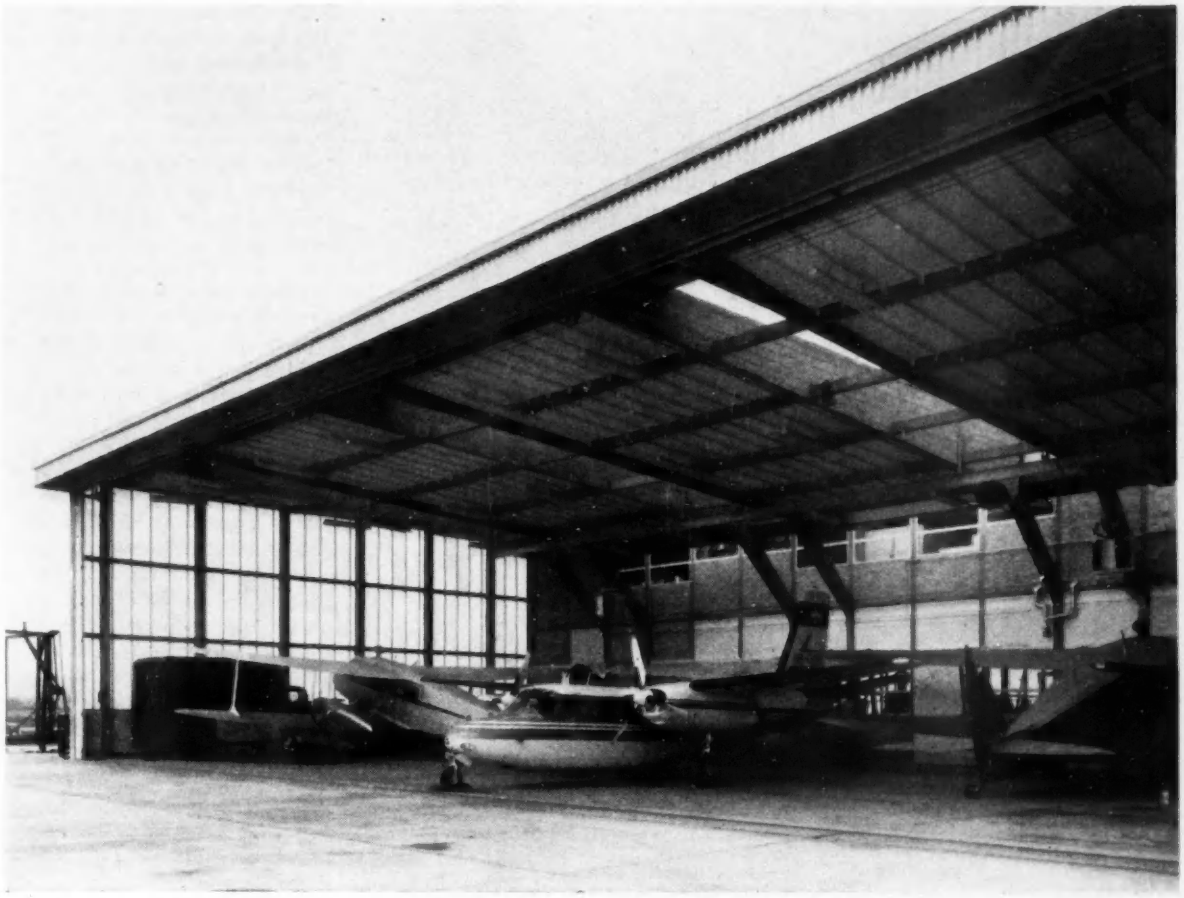
A high degree of flexibility was an important requirement of the new design, as well as a large uninterrupted door opening. A cantilevered type of building was adopted which proved to be an economical form of construction in view of the extensive two-storey annex at the back of the hangar to house workshops, stores, offices and a flight kitchen. The rigid structure of the annex as a whole resolves the reactions of the cantilever



CROSS-SECTION THROUGH HANGAR AND OFFICES
GROUND FLOOR Scale : 1 in. = 16 ft.

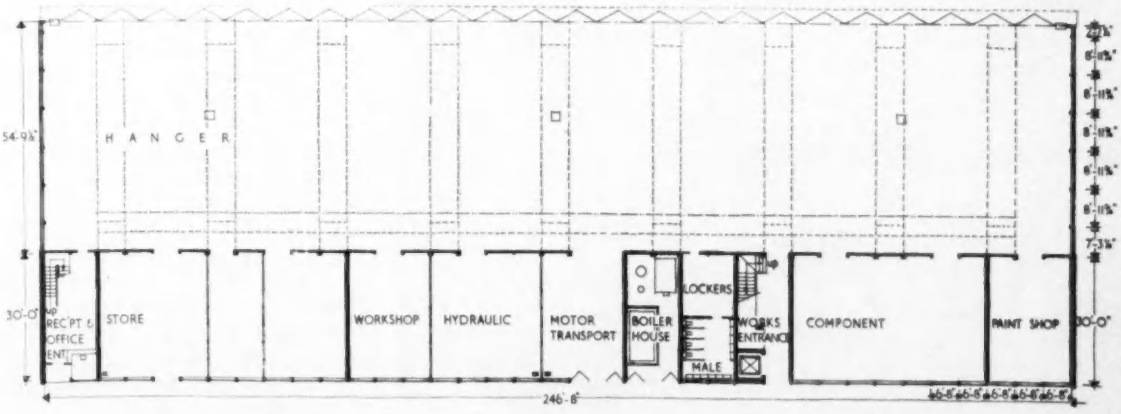
LONDON FERRO-CONCRETE CO. LTD., in association with

A. J. & J. D. HARRIS, design and erection of concrete superstructure



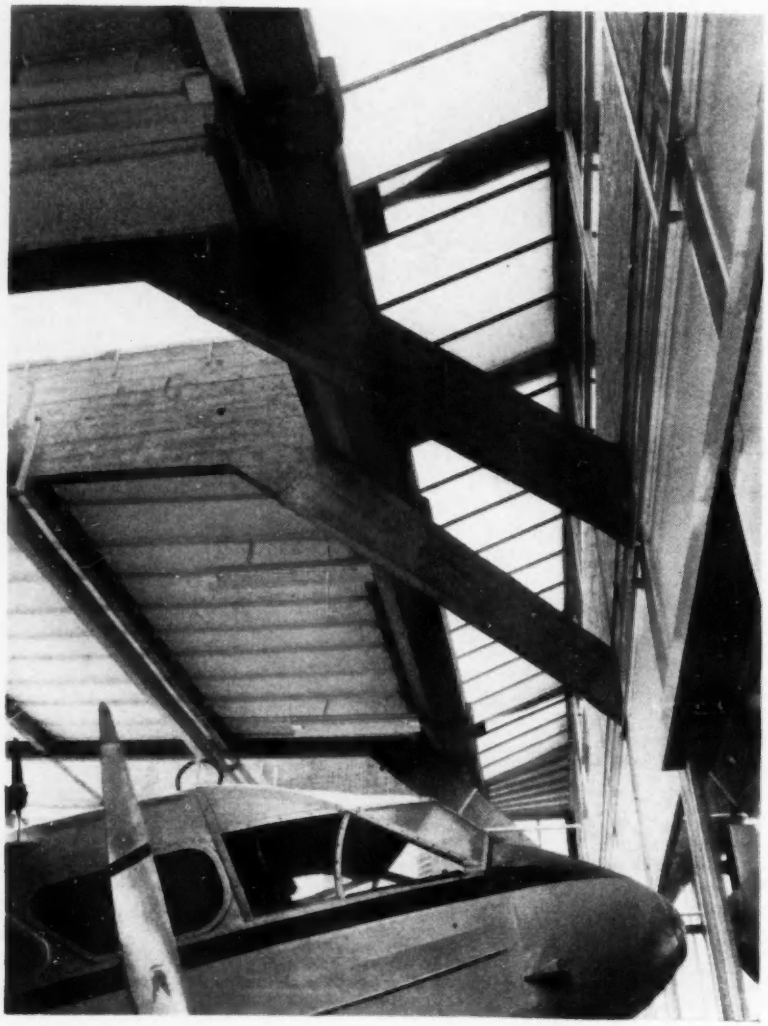
The cantilever frames are connected by concrete purlins. Roofing is stramit slabs with felt covering, and strips of patent glazing are inserted between the paired frames. The building is based on a design module of 40 in.

GROUND FLOOR Scale: 1 in. = 40 ft.



Aircraft Hangar, Gatwick

Tendons at the top of the cantilevers are carried through the roof to the back eaves to ensure good anchorage



arms supporting the hangar roof. This is an unusual way of balancing a cantilevered structure, the reactions of which are more usually resolved by an opposing cantilever or by rigid cantilever frames. In this instance, the balancing structure of the annex forms a dual purpose and is put to full habitable use instead of merely being deadweight.

The hangar is a long rectangular structure measuring 240 ft. by 58 ft.; it is designed on a 40 in. module and divided into 6 ft. 8 in. bays. The roof is sloping and is 22 ft. high at the springing of the cantilevers, rising to 25 ft. high over the doors at the front. Prestressed precast concrete has been used for the structure as it was found in the construction of the first Transair hangar to need little maintenance, to have a high fire resistance and to give clean lines. The cantilevered arms supporting the roof are arranged in nine pairs down the length of the building, and connected by concrete purlins which are covered with Stramit and roofing felt and strips of patent glazing. The sides of the hangar are almost entirely enclosed by glazed panels. A reinforced concrete apron extends along the whole of the front of the structure.

The two-storey annex at the rear is the same length as the hangar and 30 ft. wide. The roof and floors are designed to act as horizontal beams supporting the horizontal forces caused by the cantilevers, carrying these forces back to concrete cross walls which themselves are stressed down to the foundations and counterweights. Roof and floors thus consist of precast reinforced concrete beams with an 'in situ' reinforced concrete slab, and are prestressed in the direction of the length of the building to ensure strength under the cantilever forces. The tendons in the top of the cantilevers are carried through the roof to the back eaves to ensure a good anchorage. The columns are generally precast reinforced concrete, but where they are subject to uplift they are prestressed.

News of the Week

Sussex University

MR. A. E. SHIELDS, registrar of the new University of Sussex, anounced recently that tenders would be called in August for the new building. It is proposed to commence building operations in October. The architects are Basil Spence & Partners.

A Windmill in Kent

THE POLICY of the Kent County Council on the recommendation of its Planning Committee is to preserve for this and future generations few but worthwhile specimens of windmills in various parts of the county. The West Kingsdown windmill is regarded as a typical example of a smock mill in Mid Kent and is of special interest because it is so conspicuous from the London-Folkestone-Dover road. It is understood that the mill once stood in the parish of Farningham and was removed to West Kingsdown where it was reconstructed in 1880. It has not been used as a windmill for some time and has been deteriorating almost to the point of internal collapse. The restoration work required has been extensive and is likely to be completed soon.

It is an octagonally shaped timber construction on a square brick base; four new sails each 30 ft. long have been made and are on the site ready for hoisting into position. The fixing of the two sail-backs is a dangerous and highly skilled task. Each back is a timber beam 40 ft. long and weighing about 15 cwt. The sails and their backs have to be hoisted 58 ft. to the shaft for fixing. The restoration is being carried out by R. Thompson and Son, millwrights of Alford, Lincolnshire.

Surveying as a Career

AMONG its 'Career Books' 'The Sunday Times' has now included one on the subject of Surveying, by Mr. A. H. P. Gillett, MA. Entertainingly written around the experiences of a number of fictitious characters, the book describes the work involved in the eight branches of surveying — agricultural, valuation, land, building, quantity, housing, town and country planning, and mining, and gives lists of the professional bodies from which further details can be obtained, and other information. Intended primarily for those at school or university who are already interested in surveying, the book should be found most helpful in deciding which branch to take up as a career. It is published, price 3s. 6d. from Thomson House, WC1.

Conference on the Building Industry

A CONFERENCE organised by the Regional Council for Further Education for the South West in collaboration with the South Western Regional Joint Apprenticeship Committee for the Building Industry and the Devon Education Committee, will be held at the North Devon Technical College on September 10. The theme for the conference will be 'Building: a Changing Industry' and the speakers will include Mr. F. T. West, MBE, principal of Southampton Technical College, and Mr. B. F. Stanbury, FIOB, of Plymouth. The morning and afternoon sessions will be chaired by Mr. S. W. Williams, BA, FRSA, principal of North Devon Technical College, and Mr. J. A. Walters, MBE, respectively.

Feodora Gleichen Sculpture Award

MISS ANN MARSHALL, a former student of Hammersmith College of Art and Building, has won this year's award of £100 for photographs of three works which she submitted to the adjudication committee. This award is administered by the Royal Society of British Sculptors.

Retirement of Mr. R. J. Hunt

AFTER 13½ years on the staff of the LMBA, Mr. R. J. Hunt retires from the post of Area Secretary in the Association on August 31. He joined the LMBA in 1947 after four years with the South Western Federation, and in addition to his duties as an area secretary Mr. Hunt, with his wife, has been concerned in the administration of the Builders' Benevolent Institution.

All the areas of the LMBA of which Mr. Hunt has been secretary have expressed their great appreciation of his services. The good wishes of their many friends in the building industry go to Mr. and Mrs. Hunt for a long and happy retirement.

FPR Director Designate

THE NEW director of the Forest Products Research Laboratory will be Mr. A. C. Copisarow, at present scientific attaché in Paris, instead of Mr. H. Wooldridge, OBE, as recently announced. Mr. Wooldridge has agreed to withdraw his acceptance of the directorship at the special request of the secretary of the Department. This was made because of the increasing pressure of work at headquarters, DSIR. Mr Wooldridge will continue to hold the post of deputy director, Stations Division. Mr. Copisarow will take up his post in October when Dr. F. Y. Henderson, CBE, retires.

Fire Lighting Concession

MR. HENRY BROOKE, Minister of Housing and Local Government, has asked local authorities to allow the use of sticks and paper for lighting fires in smoke control areas when town gas is not available in houses. In his view, the small amount of smoke caused must be accepted in the general interest of making progress with the creation of smoke control areas.

School Fuel Consumption

A REPORT of tests with coal-fired automatic stoker warm-air systems, carried out at a school during the winter of 1956-57, is contained in the second supplement of 'Fuel Consumption in Schools' (HMSO, price 1s.), published by the Ministry of Education as Building Bulletin No. 13.

Appointments

MR. H. BENSON ANSELL, ARIBA, deputy county architect for the West Riding of Yorkshire County Council, is to succeed Mr. Simpson Low, ARIBA, as county architect for Hampshire in December.

MR. HERBERT PADGET, ARIBA, chief assistant architect at Newcastle-on-Tyne, has been appointed deputy city architect in succession to MR. RAYMOND J. ASH, ARIBA, who has taken up an appointment with Birmingham City Council.

HAMBLEDON (SURREY) RC have appointed Mr. David H. S. Evans, AMTPI, of the county planning office, Dolgelley, Merionethshire, to the Council's new post of planning officer.

MR. B. M. ROBINSON, engineer and surveyor to Kearsley (Lancashire), UDC, has been appointed engineer and surveyor to Rugeley (Staffordshire) UDC. His assistant will be Mr. A. Johnson, engineer and technical assistant with the Leek (Staffordshire) UDC.

Coming Event

SATURDAY, AUGUST 20

INSTITUTE OF BUILDERS (LICENTIATE DISCUSSION CLUB).—'River Boat Shuffle.' Westminster Pier. 7.30 p.m.

One Hundred Years Ago

From The Builder of August 11, 1860

VALUE OF LAND IN THE CITY OF LONDON.—From a recent report of the Metropolitan Railway Company, we learn that, in anticipation of the extended traffic of this line and the need of space near the goods' depot at Smithfield, the directors have determined to purchase the whole of the vacant land belonging to the Corporation of London, on the eastern side of Victoria-street and north of West-street. For this, in quantity 5 acres 19 perches, the purchase money has been agreed on at £179,157, of which £60,000 will be paid in money during the next twelve months, and the remainder by a rent charge at the rate of 4½ per cent per annum, redeemable in forty years. This is about £35,000 per acre, so that each yard of vacant ground in this locality seems at the present time to be worth about £7 5s.

This large value, which is moreover small in comparison with that of land in other parts of the City, shows the difficulty of providing, on the ordinary plan, within these limits, dwellings for large numbers of workmen, and others of moderate income, who are engaged in the City.

Professional Announcements

MESSRS. ALISTER MACDONALD & PARTNERS, 10-13 Bedford-st., Strand, WC2, have appointed MR. F. DAVID CRADDOCK, ARIBA, to be one of the associate members of the firm.

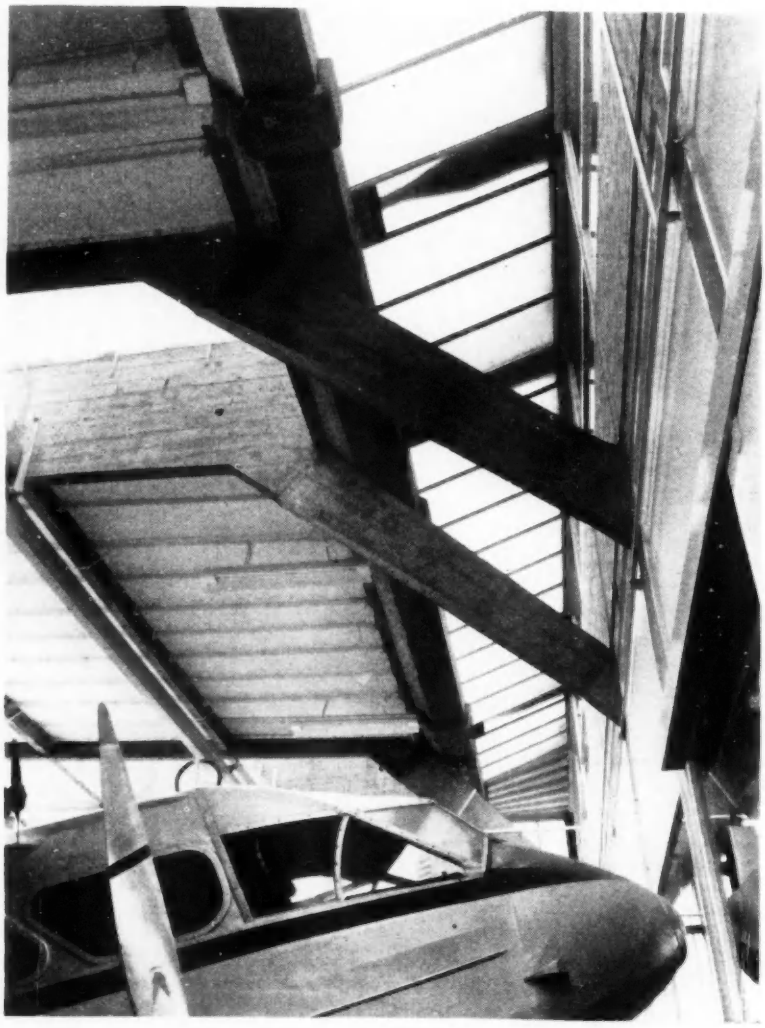
MESSRS. WILLIAM C. INMAN & PTNRS., chartered quantity surveyors, are opening an office at 95a Wolverhampton-rd., Stafford, and would be pleased to receive trade catalogues at that address.

MR. JOHN BOON, AIQS, quantity surveyor, has now withdrawn from the firm of C. E. SMART & PARTNERS, and is practising on his own at Brooke-hse., Corporation-st., Corby, Northants (Tele. Corby 3843), and would be pleased to receive trade catalogues.

MR. LAURENCE OLIVER, MIHVE, MINSTF, MRSH, consulting engineer & chartered fuel technologist, moved on July 18 to new offices at 57-59 Victoria-st., SW1 (tel.: Abbey 6782).

Aircraft Hangar, Gatwick

Tendons at the top of the cantilevers are carried through the roof to the back eaves to ensure good anchorage



arms supporting the hangar roof. This is an unusual way of balancing a cantilevered structure, the reactions of which are more usually resolved by an opposing cantilever or by rigid cantilever frames. In this instance, the balancing structure of the annex forms a dual purpose and is put to full habitable use instead of merely being deadweight.

The hangar is a long rectangular structure measuring 240 ft. by 58 ft.; it is designed on a 40 in. module and divided into 6 ft. 8 in. bays. The roof is sloping and is 22 ft. high at the springing of the cantilevers, rising to 25 ft. high over the doors at the front. Prestressed precast concrete has been used for the structure as it was found in the construction of the first Transair hangar to need little maintenance, to have a high fire resistance and to give clean lines. The cantilevered arms supporting the roof are arranged in nine pairs down the length of the building, and connected by concrete purlins which are covered with Stramit and roofing felt and strips of patent glazing. The sides of the hangar are almost entirely enclosed by glazed panels. A reinforced concrete apron extends along the whole of the front of the structure.

The two-storey annex at the rear is the same length as the hangar and 30 ft. wide. The roof and floors are designed to act as horizontal beams supporting the horizontal forces caused by the cantilevers, carrying these forces back to concrete cross walls which themselves are stressed down to the foundations and counterweights. Roof and floors thus consist of precast reinforced concrete beams with an 'in situ' reinforced concrete slab, and are prestressed in the direction of the length of the building to ensure strength under the cantilever forces. The tendons in the top of the cantilevers are carried through the roof to the back eaves to ensure a good anchorage. The columns are generally precast reinforced concrete, but where they are subject to uplift they are prestressed.

News of the Week

Sussex University

MR. A. E. SHIELDS, registrar of the new University of Sussex, anounced recently that tenders would be called in August for the new building. It is proposed to commence building operations in October. The architects are Basil Spence & Partners.

A Windmill in Kent

THE POLICY of the Kent County Council on the recommendation of its Planning Committee is to preserve for this and future generations few but worthwhile specimens of windmills in various parts of the county. The West Kingsdown windmill is regarded as a typical example of a smock mill in Mid Kent and is of special interest because it is so conspicuous from the London-Folkestone-Dover road. It is understood that the mill once stood in the parish of Farningham and was removed to West Kingsdown where it was reconstructed in 1880. It has not been used as a windmill for some time and has been deteriorating almost to the point of internal collapse. The restoration work required has been extensive and is likely to be completed soon.

It is an octagonally shaped timber construction on a square brick base; four new sails each 30 ft. long have been made and are on the site ready for hoisting into position. The fixing of the two sail-backs is a dangerous and highly skilled task. Each back is a timber beam 40 ft. long and weighing about 15 cwt. The sails and their backs have to be hoisted 58 ft. to the shaft for fixing. The restoration is being carried out by R. Thompson and Son, millwrights of Alford, Lincolnshire.

Surveying as a Career

AMONG its 'Career Books' 'The Sunday Times' has now included one on the subject of Surveying, by Mr. A. H. P. Gillett, MA. Entertainingly written around the experiences of a number of fictitious characters, the book describes the work involved in the eight branches of surveying—agricultural, valuation, land, building, quantity, housing, town and country planning, and mining, and gives lists of the professional bodies from which further details can be obtained, and other information. Intended primarily for those at school or university who are already interested in surveying, the book should be found most helpful in deciding which branch to take up as a career. It is published, price 3s. 6d. from Thomson House, WC1.

Conference on the Building Industry

A CONFERENCE organised by the Regional Council for Further Education for the South West in collaboration with the South Western Regional Joint Apprenticeship Committee for the Building Industry and the Devon Education Committee, will be held at the North Devon Technical College on September 10. The theme for the conference will be 'Building: a Changing Industry' and the speakers will include Mr. F. T. West, MBE, principal of Southampton Technical College, and Mr. B. F. Stanbury, FIOB, of Plymouth. The morning and afternoon sessions will be chaired by Mr. S. W. Williams, BA, FRSA, principal of North Devon Technical College, and Mr. J. A. Walters, MBE, respectively.

Feodora Gleichen Sculpture Award

MISS ANN MARSHALL, a former student of Hammersmith College of Art and Building, has won this year's award of £100 for photographs of three works which she submitted to the adjudication committee. This award is administered by the Royal Society of British Sculptors.

Retirement of Mr. R. J. Hunt

AFTER 13½ years on the staff of the LMBA, Mr. R. J. Hunt retires from the post of Area Secretary in the Association on August 31. He joined the LMBA in 1947 after four years with the South Western Federation, and in addition to his duties as an area secretary Mr. Hunt, with his wife, has been concerned in the administration of the Builders' Benevolent Institution.

All the areas of the LMBA of which Mr. Hunt has been secretary have expressed their great appreciation of his services. The good wishes of their many friends in the building industry go to Mr. and Mrs. Hunt for a long and happy retirement.

FPR Director Designate

THE NEW director of the Forest Products Research Laboratory will be Mr. A. C. Copisarow, at present scientific attaché in Paris, instead of Mr. H. Wooldridge, OBE, as recently announced. Mr. Wooldridge has agreed to withdraw his acceptance of the directorship at the special request of the secretary of the Department. This was made because of the increasing pressure of work at headquarters, DSIR. Mr Wooldridge will continue to hold the post of deputy director, Stations Division. Mr. Copisarow will take up his post in October when Dr. F. Y. Henderson, CBE, retires.

Fire Lighting Concession

MR. HENRY BROOKE, Minister of Housing and Local Government, has asked local authorities to allow the use of sticks and paper for lighting fires in smoke control areas when town gas is not available in houses. In his view, the small amount of smoke caused must be accepted in the general interest of making progress with the creation of smoke control areas.

School Fuel Consumption

A REPORT of tests with coal-fired automatic stoker warm-air systems, carried out at a school during the winter of 1956-57, is contained in the second supplement of 'Fuel Consumption in Schools' (HMSO, price 1s.), published by the Ministry of Education as Building Bulletin No. 13.

Appointments

MR. H. BENSON ANSELL, ARIBA, deputy county architect for the West Riding of Yorkshire County Council, is to succeed Mr. Simpson Low, ARIBA, as county architect for Hampshire in December.

MR. HERBERT PADGET, ARIBA, chief assistant architect at Newcastle-on-Tyne, has been appointed deputy city architect in succession to MR. RAYMOND J. ASH, ARIBA, who has taken up an appointment with Birmingham City Council.

HAMBLEDON (SURREY) RC have appointed Mr. David H. S. Evans, AMTPI, of the county planning office, Dolgelley, Merionethshire, to the Council's new post of planning officer.

MR. B. M. ROBINSON, engineer and surveyor to Kearsley (Lancashire), UDC, has been appointed engineer and surveyor to Rugeley (Staffordshire) UDC. His assistant will be Mr. A. Johnson, engineer and technical assistant with the Leek (Staffordshire) UDC.

Coming Event

SATURDAY, AUGUST 20

INSTITUTE OF BUILDERS (LICENTIATE DISCUSSION CLUB).—'River Boat Shuffle.' Westminster Pier. 7.30 p.m.

One Hundred Years Ago

From The Builder of August 11, 1860

VALUE OF LAND IN THE CITY OF LONDON.—From a recent report of the Metropolitan Railway Company, we learn that, in anticipation of the extended traffic of this line and the need of space near the goods' depot at Smithfield, the directors have determined to purchase the whole of the vacant land belonging to the Corporation of London, on the eastern side of Victoria-street and north of West-street. For this, in quantity 5 acres 19 perches, the purchase money has been agreed on at £179,157, of which £60,000 will be paid in money during the next twelve months, and the remainder by a rent charge at the rate of 4½ per cent per annum, redeemable in forty years. This is about £35,000 per acre, so that each yard of vacant ground in this locality seems at the present time to be worth about £7 5s.

This large value, which is moreover small in comparison with that of land in other parts of the City, shows the difficulty of providing, on the ordinary plan, within these limits, dwellings for large numbers of workmen, and others of moderate income, who are engaged in the City.

Professional Announcements

MESSRS. ALISTER MACDONALD & PARTNERS, 10-13 Bedford-st., Strand, WC2, have appointed MR. F. DAVID CRADDOCK, ARIBA, to be one of the associate members of the firm.

MESSRS. WILLIAM C. INMAN & PTNRS., chartered quantity surveyors, are opening an office at 95a Wolverhampton-rd., Stafford, and would be pleased to receive trade catalogues at that address.

MR. JOHN BOON, AIQS, quantity surveyor, has now withdrawn from the firm of C. E. SMART & PARTNERS, and is practising on his own at Brooke-hse., Corporation-st., Corby, Northants (Tele. Corby 3843), and would be pleased to receive trade catalogues.

MR. LAURENCE OLIVER, MIHVE, MINSTF, MRSH, consulting engineer & chartered fuel technologist, moved on July 18 to new offices at 57-59 Victoria-st., SW1 (tel.: Abbey 6782).

Letters to the Editor

Piecemeal Redevelopment and Traffic; Ordnance Bench Marks; Australian Topping-out Ceremonies

Piecemeal Redevelopment and Traffic

SIR,—In a recent lecture by the Royal Society of Arts, Mr. Lionel Brett, the architect, suggested that the increasing pressure on Central London could be relieved by the redevelopment of the obsolescent cores of some of the older inner suburbs. Since then news of several schemes of this nature has appeared in your pages. I do not suggest that this is cause and effect, but it shows that there is at least a trend of thought and action in the direction indicated, which should be encouraged.

The question that arises in some of these schemes is whether enough attention is being paid to the overall planning needs of comprehensive redevelopment. I have in mind a case where a large site in the centre of one of the older suburbs formerly occupied by a group of obsolescent buildings, is now being redeveloped in the form of a large block of shops and offices with underground car park accommodation. There are roads on three sides of the site, two of them main and the third a connecting link, which I believe is to be widened. The site forms part of a large island which has zebra crossings at several points.

When the new buildings are completed this area, already a very busy one, will become much more congested. At present there is no segregation of vehicular and pedestrian traffic, and so far as I am aware none is contemplated. Obviously the whole area needs to be replanned drastically with a view to future needs. I should think that several pedestrian subways, among other improvements, would be needed to provide safe access to the 'island.'

Briefly, the point I would make is that without adequate road improvements these piecemeal schemes of redevelopment must intensify traffic congestion and greatly increase the risk of accidents. No doubt our planning authorities are alive to the dangers; it would be reassuring to see more evidence of appropriate action.

JUNIUS.

Ordnance Bench Marks

SIR,—No doubt the Ordnance Survey Department at Chessington may well be able to provide adequate reply to Mr. C. Allerton Rowbotham's letter in 'The Builder' of August 5. As one of those who for the past forty years has used this efficient provision of bench marks all over the British Isles, there are a few points I would like to bring out which in a way offer added answers to his questions.

First, since the cessation of the last War the Department has been at full stretch striving not only to re-establish very many OBM's removed by enemy blitzing but on the change-over from the use of the old Liverpool datum to Newlyn. With the total number of maps to be produced this is a gigantic task, and in some areas there must and will be inconveniences in using old ordnance maps.

Nevertheless, one of the offending parties in the seeming removal of OBMs is the owner of the property who decides either to render over the face of a building or add some form of plinth, covering the mark. Being a layman he would have no idea of the importance of an OBM to other people and possibly cover it innocently.

Another has been seen to be demolition contractors' men who tear down walls of old buildings without the slightest consideration for the contractor or others who may require to use the bench mark for building operations or other surveys. Where it is obvious to the surveyor of the site operating in the initial stages of the scheme that an OBM exists on a wall likely to be demolished, it has been the practice through the years to affix a note on a survey reading as follows:—

> Prior to removal of Ordnance Bench Marks hereon shown, contact is recommended with the Ordnance Survey Dept. (Levels Section Epsom 2660, i.e., EH4—2660 . . Extn. 74) advising of same.

In every instance to date the architect has followed this and not only has the friendly co-operation been appreciated but the Department either may transfer the OBM or see to it that provision is made in further publications of the map of an area. Even with this, it takes time for older maps to be replaced by new editions. It can be said, too, that the architects often have especially instructed the demolition contractor to leave standing a a small part of a building on which an OBM is registered until a later hour in the building task.

Where OBMs cannot be found, Mr. Allerton Rowbotham would be well advised to make contact with the local authority engineer's office where mostly one can find up-to-date information as regards OBMs.

In most of our towns OBMs can be said to be positioned at reasonable distances apart, but in the country areas the point made that soon there may be no bench marks left—taking into account what has been stated above—cannot be ignored, for costs of survey work are increased where bench marks which remain are some miles from a development site.

Action of a helpful nature to all concerned can be taken by the professions and the industry in the manner above exemplified. With one's own house properly organised and efficient, the professional man then might be justifiably critical of the Ordnance Survey Department where they are not so organised. But one final point should be made, and this is that the Department through very many years has always received inquiries with courtesy and at the same time being helpful in one's problems.

GORDON TOMALIN, Consultant Surveyor,
1 Gower-street, London, WC1.

Australian Topping Out Ceremonies

SIR,—I pass on to you the appended letter from an Australian reader. It is gratifying to know that the 'Everyday Things' articles are read so far away.

ARTHUR KENYON [CBE, FRIBA],
140 Park-lane, W1.

* * *

DEAR MR. KENYON,—I was interested to read in 'The Builder' of May 1, 1959, your description of 'Topping Out' and you in turn may be interested to know that this good old custom is not altogether forgotten here. The building trade in Australia has been based on the practices and traditions of Great Britain and this particular custom, which I remember as 'Topping the job'—not 'Topping Out'—was once quite common here but has fallen into disuse and is seldom encountered today.

Recently I had my own house built—in this case I was the architect-owner—and endeavoured to maintain the custom but unfortunately, because of the system of subcontracting prevailing at present, it was impossible to get a reasonable muster of the trades together at the one time. Not to be beaten altogether we had a Sunday afternoon tea party for the builder and foreman carpenter and their families when the house was completed.

The 'topping' custom also prevails among other European tradesmen and, as our building trade has had an influx of tradesmen from many parts of Europe, these 'New Australians' are pleased to take part in this simple ceremony. It is not always a flag which tops the building for I have seen the chimney surmounted with a bush, a bottle, a hat and on one occasion an old pair of boots.

Long may this simple, fun-making ceremony survive!

C. P. HEATH [BARCH, ARIBA, ARAIA],
Commonwealth Experimental Building Station,
P.O. Box 30, Chatswood,
New South Wales.

Success with Hardwood Floors

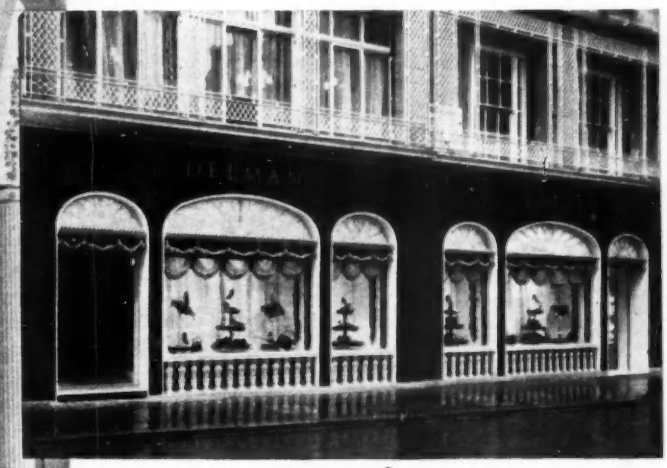
SIR,—Your correspondent in your last issue is to be congratulated on his useful and informative article, but with the greatest respect there are one or two points that I venture to criticise in his section dealing with strip flooring.

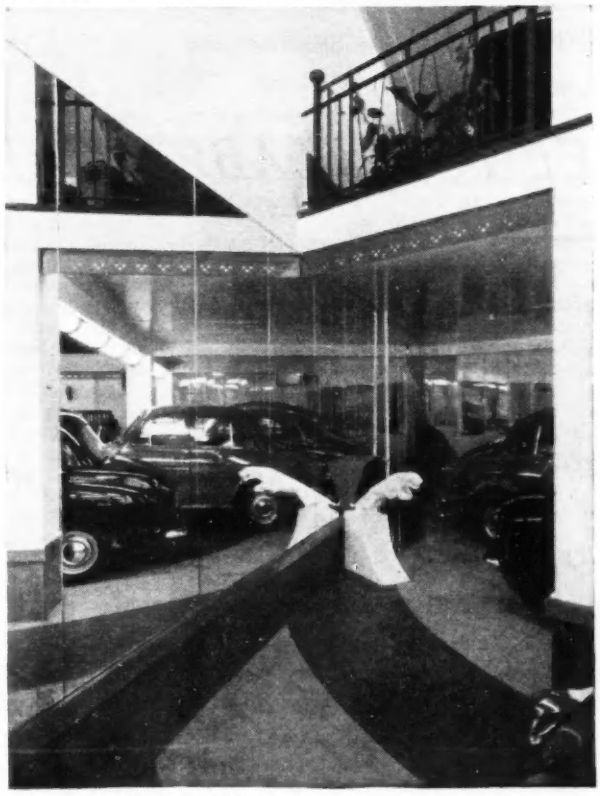
In the first place, fillets should never be less than 2 in. in thickness, because of the danger of splitting when narrow width boards are used and where the fixing nails are entered at intervals of 2¼ in. or less.

Secondly, it has been my experience that waterproof felt should never be laid over the fillets wherever there is direct to earth contact construction, because dry rot inevitably develops in the fillets in a short time. In such a position it is essential that a substantial impervious damp-proof membrane be laid over the whole area underneath the fillets and the spaces between them filled completely flush with the top. There is then no danger of rising damp affecting the floor in any way.

G. W. BUTLER, Director,
A. Vigers Sons & Co., Ltd.,
London, W1.

Rayne's — Old Bond Street, W.1,
to the instructions of G. Jackson & Sons Ltd
Designer: Oliver Messel





Henley's — Euston Road, N.W.,
to the instructions of County Glazing (Kent) Ltd.

Glass

IN MODERN DECORATION

Glass is the 20th century decorative material. The highest standards—of quality in manufacture, and accuracy in fitting—enable glass unobtrusively to perform its natural functions. Mirrors create an impression of spaciousness, and greatly increase natural and artificial light. Decorative glass panels, screens and balustrades add beauty and harmony to design.

PUGH BROS. LTD

CRAFTSMEN IN GLASS

20/23 GREVILLE STREET · LONDON · E.C.1 · Telephone: CHAncery 5311

Letters to the Editor

Piecemeal Redevelopment and Traffic; Ordnance Bench Marks; Australian Topping-out Ceremonies

Piecemeal Redevelopment and Traffic

SIR,—In a recent lecture by the Royal Society of Arts, Mr. Lionel Brett, the architect, suggested that the increasing pressure on Central London could be relieved by the redevelopment of the obsolescent cores of some of the older inner suburbs. Since then news of several schemes of this nature has appeared in your pages. I do not suggest that this is cause and effect, but it shows that there is at least a trend of thought and action in the direction indicated, which should be encouraged.

The question that arises in some of these schemes is whether enough attention is being paid to the overall planning needs of comprehensive redevelopment. I have in mind a case where a large site in the centre of one of the older suburbs formerly occupied by a group of obsolescent buildings, is now being redeveloped in the form of a large block of shops and offices with underground car park accommodation. There are roads on three sides of the site, two of them main and the third a connecting link, which I believe is to be widened. The site forms part of a large island which has zebra crossings at several points.

When the new buildings are completed this area, already a very busy one, will become much more congested. At present there is no segregation of vehicular and pedestrian traffic, and so far as I am aware none is contemplated. Obviously the whole area needs to be replanned drastically with a view to future needs. I should think that several pedestrian subways, among other improvements, would be needed to provide safe access to the 'island.'

Briefly, the point I would make is that without adequate road improvements these piecemeal schemes of redevelopment must intensify traffic congestion and greatly increase the risk of accidents. No doubt our planning authorities are alive to the dangers; it would be reassuring to see more evidence of appropriate action.

JUNIUS.

Ordnance Bench Marks

SIR,—No doubt the Ordnance Survey Department at Chessington may well be able to provide adequate reply to Mr. C. Allerton Rowbotham's letter in 'The Builder' of August 5. As one of those who for the past forty years has used this efficient provision of bench marks all over the British Isles, there are a few points I would like to bring out which in a way offer added answers to his questions.

First, since the cessation of the last War the Department has been at full stretch striving not only to re-establish very many OBM's removed by enemy blitzing but on the change-over from the use of the old Liverpool datum to Newlyn. With the total number of maps to be produced this is a gigantic task, and in some areas there must and will be inconveniences in using old ordnance maps.

Nevertheless, one of the offending parties in the seeming removal of OBMs is the owner of the property who decides either to render over the face of a building or add some form of plinth, covering the mark. Being a layman he would have no idea of the importance of an OBM to other people and possibly cover it innocently.

Another has been seen to be demolition contractors' men who tear down walls of old buildings without the slightest consideration for the contractor or others who may require to use the bench mark for building operations or other surveys. Where it is obvious to the surveyor of the site operating in the initial stages of the scheme that an OBM exists on a wall likely to be demolished, it has been the practice through the years to affix a note on a survey reading as follows:—

> Prior to removal of Ordnance Bench Marks hereon shown, contact is recommended with the Ordnance Survey Dept. (Levels Section Epsom 2660, i.e., EH4—2660 . . Extn. 74) advising of same.

In every instance to date the architect has followed this and not only has the friendly co-operation been appreciated but the Department either may transfer the OBM or see to it that provision is made in further publications of the map of an area. Even with this, it takes time for older maps to be replaced by new editions. It can be said, too, that the architects often have especially instructed the demolition contractor to leave standing a a small part of a building on which an OBM is registered until a later hour in the building task.

Where OBMs cannot be found, Mr. Allerton Rowbotham would be well advised to make contact with the local authority engineer's office where mostly one can find up-to-date information as regards OBMs.

In most of our towns OBMs can be said to be positioned at reasonable distances apart, but in the country areas the point made that soon there may be no bench marks left—taking into account what has been stated above—cannot be ignored, for costs of survey work are increased where bench marks which remain are some miles from a development site.

Action of a helpful nature to all concerned can be taken by the professions and the industry in the manner above exemplified. With one's own house properly organised and efficient, the professional man then might be justifiably critical of the Ordnance Survey Department where they are not so organised. But one final point should be made, and this is that the Department through very many years has always received inquiries with courtesy and at the same time being helpful in one's problems.

GORDON TOMALIN, Consultant Surveyor,
1 Gower-street, London, WC1.

Australian Topping Out Ceremonies

SIR,—I pass on to you the appended letter from an Australian reader. It is gratifying to know that the 'Everyday Things' articles are read so far away.

ARTHUR KENYON [CBE, FRIBA],
140 Park-lane, W1.

* * *

DEAR MR. KENYON,—I was interested to read in 'The Builder' of May 1, 1959, your description of 'Topping Out' and you in turn may be interested to know that this good old custom is not altogether forgotten here. The building trade in Australia has been based on the practices and traditions of Great Britain and this particular custom, which I remember as 'Topping the job'—not 'Topping Out'—was once quite common here but has fallen into disuse and is seldom encountered today.

Recently I had my own house built—in this case I was the architect-owner—and endeavoured to maintain the custom but unfortunately, because of the system of subcontracting prevailing at present, it was impossible to get a reasonable muster of the trades together at the one time. Not to be beaten altogether we had a Sunday afternoon tea party for the builder and foreman carpenter and their families when the house was completed.

The 'topping' custom also prevails among other European tradesmen and, as our building trade has had an influx of tradesmen from many parts of Europe, these 'New Australians' are pleased to take part in this simple ceremony. It is not always a flag which tops the building for I have seen the chimney surmounted with a bush, a bottle, a hat and on one occasion an old pair of boots.

Long may this simple, fun-making ceremony survive!

C. P. HEATH [BARCH, ARIBA, ARAIA],
Commonwealth Experimental Building Station,
P.O. Box 30, Chatswood,
New South Wales.

Success with Hardwood Floors

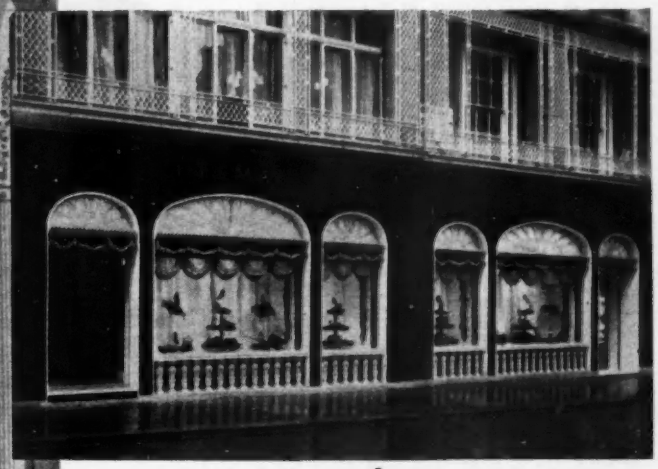
SIR,—Your correspondent in your last issue is to be congratulated on his useful and informative article, but with the greatest respect there are one or two points that I venture to criticise in his section dealing with strip flooring.

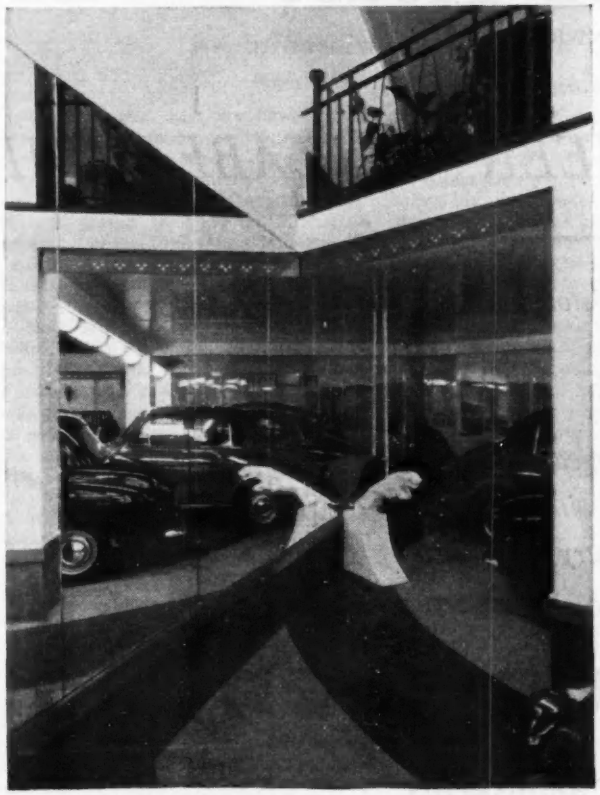
In the first place, fillets should never be less than 2 in. in thickness, because of the danger of splitting when narrow width boards are used and where the fixing nails are entered at intervals of 2½ in. or less.

Secondly, it has been my experience that waterproof felt should never be laid over the fillets wherever there is direct to earth contact construction, because dry rot inevitably develops in the fillets in a short time. In such a position it is essential that a substantial impervious damp-proof membrane be laid over the whole area underneath the fillets and the spaces between them filled completely flush with the top. There is then no danger of rising damp affecting the floor in any way.

G. W. BUTLER, Director,
A. Vigers Sons & Co., Ltd.,
London, W1.

Rayne's — Old Bond Street, W.1,
to the instructions of G. Jackson & Sons Ltd.
Designer: Oliver Messel





Henley's — Euston Road, N.W.,
to the instructions of County Glazing (Kent) Ltd.

Glass

IN MODERN DECORATION

Glass is the 20th century decorative material. The highest standards—of quality in manufacture, and accuracy in fitting—enable glass unobtrusively to perform its natural functions. Mirrors create an impression of spaciousness, and greatly increase natural and artificial light. Decorative glass panels, screens and balustrades add beauty and harmony to design.

PUGH BROS. LTD

CRAFTSMEN IN GLASS

20/23 GREVILLE STREET · LONDON · E.C.1 · Telephone: CHAncery 5311

F

Flamsteed House

GREENWICH

Opened as a museum on July 6th by

HER MAJESTY QUEEN ELIZABETH II

In the restoration of this historic 18th century building

MULLEN & LUMSDEN

are privileged to have
been entrusted with the contract
by the Ministry of Works.

Mullen & Lumsden Ltd.

LONDON | SOUTHAMPTON

RIBA Final Examination

List of Successful Candidates

THE FINAL EXAMINATION of the RIBA was held in London, Leeds, Manchester, Newcastle, Edinburgh and Belfast from June 8 to 17. Of the 267 candidates examined, 115 passed as follows: Whole examination, 82; whole examination, subject to approval of thesis, 1; passed Part 1 only, 32. 152 candidates were relegated.

The successful candidates are as follows:

WHOLE EXAMINATION

Paul Abraham, G. R. Agebeg, F. R. Altmann (Distinction in Thesis), E. T. Anstead, Donald Bates, L. J. Beach; D. H. R. Boram, Max Brewer, A. J. H. Browning (Distinction in Thesis).

I. G. Campbell, K. G. Claxton, P. R. Connolly, B. L. Courtenay, C. N. Cowen, Robert Creedon, H. K. Croft, J. E. J. Daniels, G. W. J. Davies, G. K. Deighton, Kenneth Donald.

A. J. Ede, G. W. Ellis, J. V. Fearnley, P. J. French, Richard Gardner, J. B. Garrett, D. J. Gilbert, D. I. Goad, G. A. Gray, P. D. Gray, D. S. Green, Dennis Griffith.

G. J. Hawkins, Ian Haywood, Gordon Heelis, C. G. Higgins, T. K. Hodges, J. D. Honer, James Hunter, A. R. Isaac, G. R. Jeavons, L. A. Joiner, Frank Jones, G. A. Jones, R. A. Jones.

P. M. Kerrigan, D. E. King, I. W. Kinloch, G. R. C. Lewis, D. E. McIlwaine, R. M. McTaggart, M. J. Marsh (Distinction in Thesis), H. I. Meyer, R. A. Miller, A. P. Millis; G. M. Morris, L. D. Morrison, Brian Mountain, Leslie Owen.

Luciano Perini, D. S. Philip, J. E. Porter, D. I. Preston, J. F. Price, D. I. Prosser, Rosiah Rajendram, F. K. Rawson, J. T. Renhard, J. M. Richardson, K. M. Roberts.

H. E. Senkowsky, R. G. Simpson, J. G. Sims, Harold Smith (Subject to approval of Thesis), J. P. Smith, Raymond Smith, R. B. Stuckey, Janos Trajer, J. L. Way, Alec Wells, D. H. White, R. K. Wood, B. M. Woodford.

PART I ONLY

B. H. Andrews, Mrs. Barbara Bienias, J. S. Butler, B. A. Chohan, J. C. Cornish, M. G. Curran, J. E. Davies, R. C. Davies, James Farquharson, John Gibbon, A. R. Goodwright, Reuben Grand, E. C. Janes, R. W. Joyce, Keith Miller, J. A. Moody, Ian Myatt.

C. D. Pearson W. G. I. Pomeroy, F. M. Pope, K. J. Price, A. F. J. Pritchard, G. L. Robbins, R. J. Roberts, T. A. Rosie, J. M. A. Royle, G. F. Ruggles, A. W. Scholfield, M. C. Shepherd, I. G. T. Swallow, D. T. Willars, D. W. A. Wilson.

The Special Final Examination

The Special Final Examination was held in London, Leeds, Manchester, Newcastle, Edinburgh and Belfast from June 8 to 17. Of the 144 candidates examined, 39 passed, as follows: Whole examination, 34; Part 1 only, 3; Part 2 only, 2. 105 candidates were relegated.

The successful candidates are as follows:

WHOLE EXAMINATION

F. D. Allen, B. A. Ashfold, W. G. Bannister, J. R. Bell, W. H. Benjamin, B. G. W. Blackwood, Geoffrey Brown, Denis Cooper, T. A. R. Davies, E. R. Davis, K. A. Dryburgh, N. A. Edmonds.

R. C. Fuller, G. E. Grubb, C. M. Harding, Godfrey Harrison, D. S. Hill, S. V. Joel, G. H. Jones, W. C. Knowles, Mrs. Maria Liebesman, Miroslaw Lutomski, V. J. Mew, C. R. Murray, J. W. Ridgett.

Fred Seddon, R. C. Smith, Jan Stancel, E. N. Taylor, S. D. Taylor, Derek Walden, L. A. Wild, L. W. Wixey, Miss J. F. Zehetmayr.

PART I ONLY

D. G. Marshall, T. J. Moore, Janusz Nekanda-Trepka.

PART II ONLY

R. W. Jones, J. W. G. Rule.

Architecture as a Career

Revised Ministry Booklet

'BOYS AND GIRLS who are likely to be suitable for careers in architecture often show, while still at school, an observant awareness of their surroundings, and enjoy sketching the buildings they see.' This is stated in 'The Architect,' a revised booklet in the 'Choice of Careers' series, issued by the Central Youth Employment Executive and published on August 3 (HMSO, price 1s.).

The booklet is illustrated and describes, in non-technical language, the day-to-day work and responsibilities of architects and their assistants. It discusses some of the basic ideas underlying all architecture, but does not attempt to give detailed technical information of the kind that can be found in textbooks.

The booklet points out that the offices of architects are broadly of two types, private and official. The private architect obtains his work from public bodies, commercial and industrial firms and private persons. He derives his income from fees for each job he does, and maintains his own independent office. A separate chapter of the booklet explains the work of the second, or salaried type of architect employed by large commercial firms, local authorities, government departments and public corporations. Other chapters indicate the personal qualities that an intending architect should possess, his educational qualifications and professional training, and openings and salaries.

Further information and advice about this or any other career may be obtained by young persons under 18 years of age from a Youth Employment Office, or by those over 18 from any Employment Exchange.

Architectural Education in Belfast

University Invites Discussions

'A FULL-TIME recognised course in architecture is the most satisfactory way of becoming qualified for entry to the profession,' states the chairman of the Belfast Architectural Group, MR. SHANE BELFORD, ARIBA, in a letter to the Vice-Chancellor of Queen's University, Belfast, Dr. Michael Grant, commending the university's renewed interest in the teaching of the subject.

Mr. Belford states that the group would like to express its satisfaction that the university has invited Belfast Corporation Education Committee to discuss the future of architectural education in the city.

The letter adds that the group hopes that due notice will be taken, when new courses are being considered, of the vast amount of rethinking on architectural teaching which is now taking place throughout Great Britain.

Architectural Draughtsmen's Salaries

Civil Service Claim Presented

LETTERS from several Government Departments about the difficulty of recruiting architectural and engineering draughtsmen were quoted when the pay claim on their behalf was presented to the Civil Service Arbitration Tribunal on July 21 and 22 by the Institution of Professional Civil Servants and the Society of Technical Civil Servants. This is reported in the August issue of 'State Service,' the Institution's journal.

The two associations, who represent 5,778 established and 2,249 temporary staff in the draughtsmen's classes, are pressing for increases ranging from £50 to £325 a year from October 1, 1958, with smaller increases from January and July of 1957. The Treasury have offered increases ranging from £20 to £90 a year from December 1, 1958, only.

The Treasury say that it would cost £1,400,000 a year to concede the claim, with another £5,000,000 for the retrospective pay. Their offer would cost £450,000 a year, with £750,000 for arrears.

The joint committee who prepared and presented the case had Mr. Stanley Mayne, general secretary of the Institute, as chairman and Mr. C. Cooper, general secretary of the Society, as secretary.

An interim increase was given to the draughtsmen from January 1, 1957, and the class was referred to the Pay Research Unit, who completed their report in April, 1959. The Treasury and the two associations agreed on working arrangements for adjusting the figures derived from the pay of draughtsmen in outside industry to take account of differences in hours, superannuation and other conditions, but arrived at different results.

Books Received

**** Books noted in these columns may be obtained on application to the Book Dept., 'The Builder,' 4 Catherine-street, Aldwych, WC2. Cash (to include postage on books to the value of 10s., 9d.; over 10s., 1s. 6d.) should accompany the order.*

REINFORCED CONCRETE RESERVOIRS AND TANKS. 4th Ed. By W. S. Gray. Revised by G. P. Manning. (London: Concrete Publications Ltd., 1960.) Price 12s.

ARCHITECTS' YEAR BOOK. Vol. 9. Edited by Trevor Dannatt. (London: Elek Books, Ltd.) Price 50s.

More Everyday Things

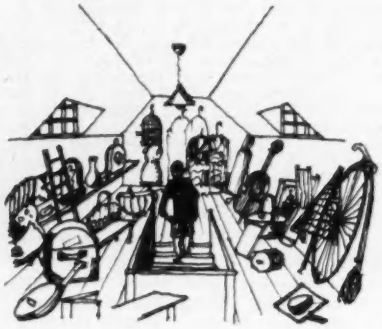
BY ARTHUR W. KENYON, CBE, FRIBA

2. The Store

LOOKING OVER a block of newly inhabited council flats which I recently built, I gazed at the neat row of tidily numbered little storage rooms which I had carefully provided on each staircase so that every household should have its own ration of cubic space in which to store unneeded, though perhaps not unloved, possessions. My mind went back to the attic of my boyhood days, and I wondered whether these mean little stores could ever be to modern youth what attics were to those of us lucky enough to have them in the homes of our childhood.

From the brief glimpses I have had into these modern storage boxes, I cannot think that they will ever hold the family junk or offer the prospect of adventure of those far-off attics. What treasure houses they were! Winter things were to be found there in the summer months, and in winter the unwanted summer things found a temporary home. Winter curtains, heavy eiderdowns, thick pile rugs, fire irons, extra blankets; all lived there from May to September, whilst from September to May it was jam pans, cider stills, deck chairs, picnic baskets and all the rest of the family's paraphernalia of summer.

The chief treasure of all lay beyond this easily accessible seasonal collection. It was beyond the jam pans and the fire irons that real adventure began. Trunks, boxes (sometimes locked but with luck not always) musical instruments, discarded children's toys, old cradles, strange costumes, travellers' trophies, parasols, family albums—a veritable wonderland for any child of imagination, and what child is there without? All attics were a stage supplied with all the properties of theatreland and more. My own prize



The Store

find, I remember well, was a concertina. But alas, I remember too that the grown-ups of the household had reached that last sad state of grown-updom whence imagination had fled, and the stirrings of the musician in me went unheeded, never to be revived.

I am told that the council tenants are grateful for their neatly docketed little stores and find good use for them. I doubt if the family historian will ever seek his inspiration there, but who is to say that some young space-exploring scientist of another century will not find childish adventures among the discarded television sets and the out-of-date appliances of stereophonic sound? So more storage space please, if young imaginations are to be fired within the curtilage of the home.

Obituary

S. J. Wearing ; H. E. B. Cavanagh

Stanley John Wearing, FRIBA, FSA

THE DEATH OCCURRED at Norwich on July 26, of Mr. Stanley John Wearing, FRIBA, FSA, architect and antiquary. He was 79.

In 1911 Mr. Wearing won a design competition sponsored by 'The Builder' for a new façade to the headquarters of the Royal Institute of British Architects; and in 1925 he submitted the winning design for the Norwich Masonic Hospital scheme. He was a member of the Norwich Archaeological Society and had been a member of the Council of the Norwich Association of Architects. Among his principal works were: the Isolation Hospital at Ely in 1915; Thetford YMCA in 1911; 300 houses erected under the 1919-22 Government housing schemes; and 200 houses erected under the 1923 and subsequent schemes. Mr. Wearing was the senior partner in the Norwich firm of Wearing and Hastings.

H. E. B. Cavanagh, ARIBA

WE REGRET to announce the death of Mr. Howard Ernest Bernard Cavanagh, ARIBA, AADip, architect to the chief civil engineer of the Western Region of British Railways. Mr. Cavanagh died after a sailing accident off the Isle of Wight on August 3. He was 51.

Mr. Cavanagh was born in India in 1909, was educated at Clifton College and received his professional training at the Architectural Association, London. He subsequently gained experience in the offices of Graham Dawbarn, FRIBA, H. Barnes & Partners, and Morris de Metz, FRIBA. He joined the service of the former Great Western Railway after his demobilisation from the Army in 1945, as temporary assistant to the architect. He became assistant architect in 1947 and architect in 1949.

Mr. Sydney Fox-Davies, MInstRA

THE DEATH has occurred of Mr. Sydney Fox-Davies, MInstRA, at his home in Weston-lane, Oswestry, Shropshire.

Municipal Building Managers

THE FIRST annual conference of the Institute of Municipal Building Management will be held at Salford on October 13 and 14. Papers to be submitted will include 'Aids to Management' by Mr. Raymond Nottage; 'Tendering for Capital Works by Direct Labour Departments,' by Mr. A. E. Ullmer, MIMunBM; and 'The Organisation of a Municipal Building Department for Maintenance and New Building Works' by Mr. H. Plummer, MIMunBM.

Intrusion into a Green Belt

Minister Approves Proposal for Car Factory at Hooton

MR. HENRY BROOKE, Minister of Housing and Local Government, has approved an application by Vauxhall Motors, Ltd., for planning permission to build a factory on a 400-acre site at Hooton, Wirral, Cheshire. The application was referred to the Minister for his decision at his direction under section 15 of the Town and Country Planning Act, 1947, and a public inquiry was held on June 14 to 17.

The letter giving the Minister's decision says that the proposal represents a substantial intrusion into the proposed Wirral Green Belt. It continues, however, 'In considering the application, the Minister has been impressed by the urgency of the economic factors, namely, the high and persistent unemployment on Merseyside generally and the special need within that area for additional employment in a district which is to receive overspill on a large scale from other parts of the area. In the exceptional circumstances he has decided that it is right to grant the permission sought.

'He has considered carefully what safeguards should be imposed by way of conditions attached to it. He agrees with the Inspector that the permission should be made personal to your clients. He understands the reasons which led the county council to suggest that specified parts of the site be excluded from development for the time being; but this would not be acceptable to your clients and he has decided to accept his Inspector's view that it would be unwise at this stage to attempt to control the form and distribution of development too closely.

'He thinks that, in addition to a condition requiring the design of the buildings and the layout of the site to be agreed with the local planning authority, it would be right, in order to protect the amenities of the area as far as possible, to attach further conditions relating to the screening of the site, the disposal of refuse and industrial waste, and the storage of materials.'

Employment in Building

THE NUMBER in civil employment during June is estimated to have increased by 70,000 to 23,593,000. The total employed in the construction industry at the end of June was 1,541,000, an increase of 5,000 over the previous month, according to Ministry of Labour statistics.

YOU CAN PUT ALL YOUR EGGS IN ONE BASKET

BECAUSE WITH **CIMENT FONDU** YOU CAN MAKE 4 TYPES OF CONCRETE

SEND FOR A COPY OF 32 PAGE BOOKLET "THE CEMENT FOR INDUSTRY"

LAFARGE ALUMINOUS CEMENT CO. LTD. 73 BROOK STREET, LONDON W.1 · TEL: MAYfair 8546

CIMENT FONDU ALUMINOUS CEMENT

AP 120

FALKUS
BROS. LTD.

BUILDING CONTRACTORS

CRAFTSMANSHIP
THROUGH APPRENTICESHIP
is our watchword and to do things finely and thoroughly is our endeavour.

The FALKUS ORGANISATION
has achieved in no small degree the satisfaction which derives from good workmanship and a worthy Clientele gives hearty assent.

46 · BISHOPSGATE · E.C.2

Telephone:
London Wall 1876 Bishopsgate 3381-4 (4 lines)

Telegrams:
"Falbrowok, Spimark, London"

BRS to Study Hospital Building Costs

New Project Described in Station's Annual Report

HOSPITAL design and construction is to be investigated by the Building Research Station and a programme of research is now being arranged with the Ministry of Health and the Department of Health for Scotland. This is announced in the annual report of the Building Research Station, DSIR, published on August 8.*

Government expenditure on hospitals is to increase substantially—it may amount to £300m. over the next six or seven years—and there is much scope for rewarding research in this field. For example, the cost of engineering services in hospitals (heating and ventilation, operating theatre services, lighting, etc.) can amount to a third of the total building cost. Ways of providing these services more economically will be studied by the Station.

Cost studies will also be carried out on recently constructed hospitals in an effort to identify other parts of the building process where economies might be achieved. It should be possible to pick out anomalies in building costs between different hospitals of similar capacity and to trace their causes.

Engineering services are important not only in hospitals. In most large buildings engineering installations have become increasingly complex and expensive. Their integration with the building design and in the process of construction frequently cause dislocation and delay. The Station is investigating these problems.

Other points from the report are:

High Flats Expensive

The Cost of Housing.—During the year a study was completed on the relative costs of providing housing by high blocks in city centres, by suburban development and in new towns. In general, the scope for using high block residential buildings as a means of reducing the cost of providing housing and urban amenities was found to be very limited. Their construction cost is about two-thirds greater than that of two-storey houses and maintenance costs are also considerably higher.

The advantage of high density redevelopment in the centre of cities is that it reduces the number of people who have to be rehoused in suburbs or new towns. Suburban development may cost £750,000 for every 10,000 people, and the cost of a new town for 80,000 may be nearly £100m. However, the real cost of new development is less because it has longer potential life than the old buildings, and is cheaper to run and to operate in.

Nuclear Reactor Shields. — In the massive concrete structures used for biological shielding in the reactors being constructed for the British nuclear power programme, the effects of temperature, drying shrinkage, creep and radiation are important factors. A two-part research programme has been undertaken in collaboration with the UKAEA Industrial group: first, laboratory studies of the properties of concrete, and secondly long-term observations on the shields at Calder Hall and Chapelcross. In the first reactor to become operational, Calder Hall, observations show that little drying of the concrete has yet taken place and that concrete temperatures are rather lower than expected. Instruments have also been installed in two of the Central Electricity Generating Board's nuclear stations.

Research on Tunnels.—The excavations on the South Bank of the Thames for the new Shell Headquarters went down to 40 ft., to within 4 ft. of the Bakerloo Tube tunnels, over a distance of about 120 yards. Work on the design of tunnels has been in progress at the Station for several years and this was a valuable opportunity for practical investigation. In collaboration with the London Transport Executive, the Station has been taking measurements at intervals during the year of the deformations and stress changes in the tunnel linings.

Although all the data obtained has not yet been analysed, the broad effect of removing the soil above the tunnels has been found to be a slight displacement and change in shape in the tunnel. The vertical diameter of the southbound tunnel, which lies on top of the northbound and was affected most, increased by about ¼ in. There was also a general reduction in the compressive stresses in the cast-iron lining.

Flat Roofs.—The use of flat roofs seems to be increasing in all types of buildings, both domestic and industrial. One problem that has led to frequent troubles is the movement of moisture inside the roof structure when the outside temperature changes. Water vapour cannot escape from the humid interior of a building through a flat roof as it can through a tiled one, and condensation can occur. Excess water is also present in a concrete roof cast 'in situ' and is difficult to dry out. A working party has been set up to study these problems by the International Council for Building Research, Studies and Documentation. During the year the Station started contributory experiments on the thermal properties of six different types of flat roof in the pilot-scale roof laboratory.

Sound Insulation of Buildings.—To be effective barriers to sound, walls and floors should be as massive as possible, but with recent advances in structural design, sound insulation now requires much additional and otherwise useless weight in partitions in flats, schools, hospitals and offices. As a continuation of field work, two specially designed experimental buildings, one brick and one frame, are now coming into use at the Station. Each comprise two floors with four rooms in each, providing four party walls and four party floors. A series of wall and floor constructions will be tried, starting with an investigation of various materials for the resilient layers of floating floors.

Heating of Flats.—To help local authorities in their decisions on space and water heating systems in multi-storey flats, the Station has made a study of the efficiency of different methods. Four types of system were examined: individual solid-fuel appliances, electric floor-heating with radiant fire topping up, individual gas heating, and central heating. A report now being prepared for publication will include data on capital, maintenance and fuel costs, as well as the occupants' opinions of the system.

Failure in Plaster Adhesion.—During the year several large-scale failures have again been reported in adhesion of plaster applied to concrete, most of them following a rise in temperature. Evidence points to the view that, where there is weakness in adhesion, failure is due to stresses set up by differential thermal expansion between the plaster and the background. With limestone or granite concrete this differential expansion is double that with gravel concrete. Adhesion can be substantially improved by wetting down the plaster, or by using a suitable bonding surface immediately before applying the liquid.

Scottish Building Problems.—It is now ten years since the Scottish Laboratory at Thortonhall was opened to link the Station with the Scottish building industry. Among many changes during the decade is the adoption throughout Britain of new materials and methods of construction. These are replacing the traditional building methods evolved to withstand Scottish weather conditions. An essential part of the laboratory's research programme is thus the study of climate and its effect on building materials.

* Building Research 1959. Published for DSIR by HMSO, price 7s. (by post 7s. 6d.).

A Matter of Colour

Chichester Controversy Over Painting of Shops

SHOPKEEPERS in the main streets of Chichester, West Sussex, may find that they have to ask the City Council to approve the colour of the paint for use on the exterior of their premises.

This follows a controversy which was initiated by Mr. Peter Sykes, a South-street draper who, after painting his shop-front a sober, slate-grey, was 'horrified' when his neighbour, a grocer, painted his own shop exterior a bright, lemon-yellow. Mr. Sykes sent the City Council a strong letter of protest.

In Chichester, public opinion is divided. Some think the bright yellow of the grocer's shop 'nice'; others say it is 'diabolical.' The question now is —will the grocer change his colour scheme? The City Planning Committee have decided to ask him if he is willing to do so.

The Committee also decided to ask the views of the Minister of Housing and Local Government, the West Sussex County Council, the Civic Trust, and the Chichester Chamber of Commerce about their idea of seeking powers to make it necessary for shopkeepers and others in the city's four main streets to get permission prior to painting their premises.

Cricket

RICS Draw with the RIBA

THE RICS CRICKET XI in their annual match against the RIBA, played at Cheam on July 27, achieved a draw in their own favour, the RIBA scoring 139 for 8 wickets in reply to the RICS score of 260 for 4 declared.

The Surveyors had the opening use of a good pitch and the first wicket fell at 43 in 53 minutes, Eastall having scored 21. At 65, Harrison tried unsuccessfully to sweep Batty and was bowled for a useful 30. With the last ball before lunch Deagle was bowled by a good ball from Gover. After the resumption came the best cricket of the match, Drew and Ridgwell together scoring 132 in exactly one hour without being parted. Drew, who was at the wicket for two hours, started cautiously, scoring 26 singles in his first 50, but the rest of his innings included 8 fours, and three sixes came in one over off the architects' skipper Derek Robinson. The last of these was a tremendous straight hit to the right of the bowler, the ball landing on the railway after striking a poplar tree. Drew has played against the architects three times, his previous scores being in 1956, 100 and 1957, 53, without once being dismissed. A very fine achievement. Ridgwell gave him grand support and his undefeated knock of 48 included only seven singles. The declaration came after less than three hours batting.

The architects had to struggle throughout their innings, the only batsman staying any real length of time being Peter Johnson, who the previous year in this match scored a brilliant 129 not out to give his side victory by 6 wickets. This time he was not so fluent with his strokes but his 58 (six boundaries) undoubtedly saved his side from defeat. He was dismissed by a dolly catch at point by Deagle. Robinson and Gover were out to beautiful catches by Drew and Ballard respectively. Each of the six bowlers participated in the wickets which fell. Strachan, who plays his cricket for West Lothian County in Scotland, bowled particularly well without any luck, several early chances not being held. His final analysis was 19 overs, 6 mdns., 28 runs, 1 wicket. Scores:

RICS

†Eastall, D. H. b. Spooner	21
Harrison, R. G. b. Batty	30
Drew, J. not out	111
Deagle, D. b. Gover	23
*Goater, A. b. Gover	9
Ridgwell, R. not out	48
Extras	18
Declared for 4 wickets	260

Did not bat: C. D. McLagan, P. Champion, B. Lindsay, G. Strachan, B. W. Ballard.

RIBA

Marlow, A. b. Lindsay	4
Batty, J. G. ct. Eastall b. Strachan	16
Johnson, P. ct. Deagle b. Lindsay	58
Spooner, W. l.b.w. Ballard	2
Nicholls, B. l.b.w. McLagan	9
*Robinson, D. ct. Drew b. Ridgwell	12
Gover, B. ct. Ballard b. Champion	4
Roberts, K. l.b.w. McLagan	10
Stevens, D. not out	4
Brown, K. not out	1
Extras	19
For 8 wickets	139

Did not bat: †M. E. Packe.
* Captain. † Wicketkeeper.

Golf

Architects versus Surveyors

THE RIBA GOLFING SOCIETY played the Chartered Surveyors Golfing Society at Worplesdon Golf Club on July 20. The surveyors carried the day in both singles (7 matches to 4) and foursomes (4½ to ½), the final result being 11½ to 4½.

SINGLES

Duncan Scott	0	R. W. Gleed	1
Dick Scott	0	F. Trumper	1
W. Mullins	0	H. Watney	1
E. Firmin	0	D. Fish	1
M. Twigg	1	O. Chesterton	0
R. Shannon	1	E. N. Harris	0
S. N. Statham	0	P. Grafton	1
J. Barnard	0	K. H. Bole	1
Col. Duckett	1	I. G. Neilson	0
J. Maxwell	0	L. Newton	1
W. R. Preston	1	M. H. Thackray	0
	4		7

FOURSOMES

R. Scott, M. Twigg	½	O. Chesterton, F. Trumper	½
Duncan Scott, R. Shannon	0	R. W. Gleed, E. N. Harris	1
S. H. Statham, J. Barnard	0	P. Grafton, K. H. Bole	1
E. Firmin, W. Mullins	0	H. Watney, R. Preston	1
J. Maxwell, M. H. Thackray	0	L. Newton, I. G. Neilson	1
	½		4½
TOTAL	4½	TOTAL	11½

Builders v. Engineers

DESPITE a fairly substantial lead by the Builders during the initial stages, the match between the London Master Builders' Association Golfing Society and the Metropolitan Engineers' Golfing Society at Hendon Golf Club on July 12 ended in a draw. At the close of the morning session the builders were leading by 3 matches to one. During the afternoon the position was reversed, thus resulting in final figures of 4 matches all. The teams were: Builders.—E. J. Cook (captain), W. L. Makin, B. L. High, F. N. Carmody, P. H. Bates, V. R. Hill, W. J. Jerram and J. R. Lyddon. Engineers.—J. L. Sharratt, J. H. Catt, Miles Hudson, D. Hudson, W. Strother, S. J. Purkis, W. H. Gimson and M. J. Grant.

Building Education in Scotland

Common Syllabus Agreed

From a Correspondent

THE Scottish Joint Committee for National Certificates and Diplomas in Building, under the chairmanship of Cllr. A. H. Brechin, OBE, a member of H. A. Brechin and Co., chartered surveyors, Edinburgh, has agreed to a common syllabus for building trade education in Scotland.

This is a big step forward in building trade education in Scotland and one which has been sought for some ten years. It provides a uniform standard of training and ability for the whole country. It is based on three main subjects: building construction, building science and mathematics. The main emphasis will be on new methods of construction.

The course will be available in more than half of the education authority colleges in Scotland. It will extend over three years and will normally be available either by part-time day study or evening study.

There was a conference of teachers in Glasgow in March when the idea of a common syllabus was approved. Up till now the various centres have worked on their own pattern of training. This led to a complaint that the courses lacked breadth and status in that the certificates were purely local rather than national, a complaint corrected in the new scheme. A working committee was set up headed by Dr. Sidwell, head of the Building Department at Heriot-Watt College, and the present accepted programme is the result of that committee's work.

RIBA Maintenance Scholarships

Architectural Awards

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS announce that the following maintenance scholarships have been awarded for the year 1960/61:

An RIBA Houston scholarship of £125 p.a. to D. R. A. Gerrard of Bath, Somerset.

An RIBA Houston scholarship of £125 p.a. to R. M. Watson of West Wycombe, Bucks.

An RIBA Howe Green 4th and 5th Year scholarship of £40 p.a. to J. C. Evans of Northampton.

'The Builder' scholarship of £75 p.a. to J. A. Taylor of Newcastle upon Tyne.

The Ralph Knott Memorial scholarship of £45 p.a. to D. M. Castle of London.

An RIBA 4th and 5th Year scholarship of £60 p.a. to J. A. McAdam of Cardiff.

Maintenance scholarships previously awarded to the following candidates have been renewed:

H. M. Cummings (School of Architecture, University of Manchester—RIBA Houston scholarship of £125 p.a.).

A. G. A. Spicer (Department of Architecture, Kingston-upon-Thames School of Art—RIBA Houston scholarship of £125 p.a.).

Nicholas Wood (Cambridge University School of Architecture — RIBA Houston scholarship of £125 p.a.).

The Hartley Hogarth Maintenance Scholarship of £56 to P. R. Kuttner, of Keighley.

Toughest boot of all – made for rough treatment

DUNLOP BULLDOZER BOOT—really heavy-duty seamless rubber boot for building work, with Resifort sole. Light and flexible. Available with hob nails and digging plates if required. Also at home on the building site: *Workmaster*, sizes 5-11, **45/9d;** *Target*, sizes 6-12, **33/6d;** *Lumber*, laced boots, sizes 6-12, **35/6 or 32/-.**

You get MORE LIFE out of

DUNLOP

FOOTWEAR

DUNLOP FOOTWEAR LTD., WALTON, LIVERPOOL 9

Manufactured specially for the BUILDING TRADE

- **EASILY CLEANED**
  Set Cement, Mortar or Plaster is easily removed by simply flexing the sides and pressing the bottom.
- **CHEMICAL ACTION**
  The "RUBBATEX" is resistant to most chemicals used in the Building Industry and does not rust or corrode.
- **ACCIDENTAL DAMAGE**
  The risk of damaging baths, sinks, fireplaces, tiles, painted or polished woodwork is eliminated.
- **SAFETY ANGLE**
  Reduces the risk of accidents.
- **PREVENTION OF PILFERING**
  Can be branded with the name or initials of your Company on the base.

from **12/6** each

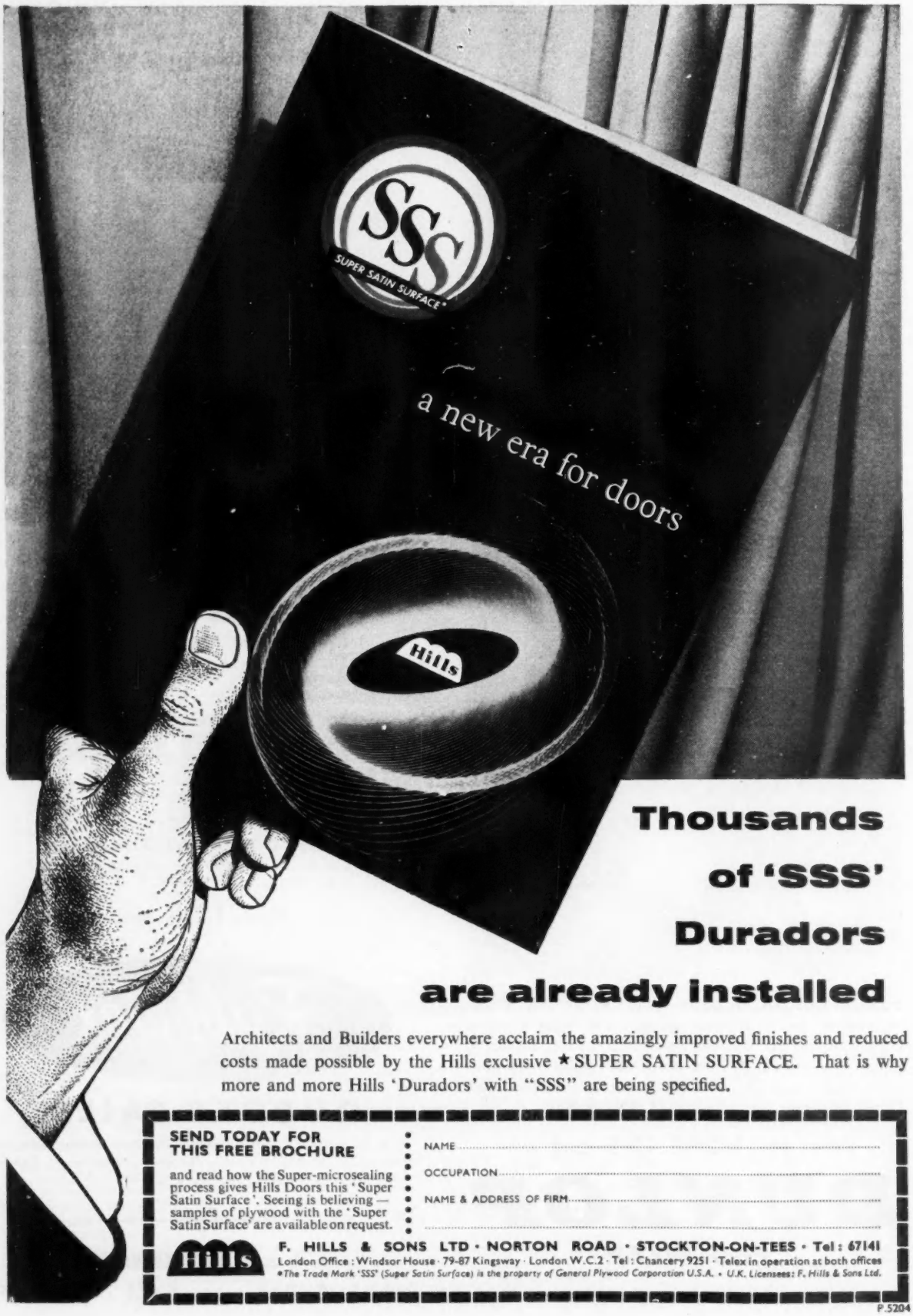
'Rubbatex'

RUBBER PAILS

Used by Builders everywhere and in Municipal Buildings, Hospitals, Laboratories, Housing Estates, Transport Departments, Canteens, Laundries, etc.

S. & J. H. SWINNERTON LTD.

DERBY WORKS - BURY - LANCS



Thousands of 'SSS' Duradors are already installed

Architects and Builders everywhere acclaim the amazingly improved finishes and reduced costs made possible by the Hills exclusive ★ SUPER SATIN SURFACE. That is why more and more Hills 'Duradors' with "SSS" are being specified.

SEND TODAY FOR THIS FREE BROCHURE

and read how the Super-microsealing process gives Hills Doors this 'Super Satin Surface'. Seeing is believing — samples of plywood with the 'Super Satin Surface' are available on request.

NAME .....

OCCUPATION .....

NAME & ADDRESS OF FIRM .....

.....

Hills

F. HILLS & SONS LTD · NORTON ROAD · STOCKTON-ON-TEES · Tel: 67141

London Office: Windsor House · 79-87 Kingsway · London W.C.2 · Tel: Chancery 9251 · Telex in operation at both offices

**The Trade Mark 'SSS' (Super Satin Surface) is the property of General Plywood Corporation U.S.A. • U.K. Licensees: F. Hills & Sons Ltd.*

P.5204

Expenditure on Roads and Public Buildings

Committee of Public Accounts' Criticisms

By Our Parliamentary Correspondent

A COMMITTEE of MPs has reported to Parliament that they believe that such highly inaccurate estimates as had occurred on road construction schemes might vitiate the Treasury's control over the allocation and use of resources. They recommend that the Treasury should consult with the Ministry of Transport to see whether the standard of estimating could be improved to make control more effective.

The Committee of Public Account made a report on July 27. The Committee comprised 15 MPs of the two major parties presided over by Mr. Harold Wilson, the 'Shadow Chancellor.' The membership also includes Sir Edward Boyle, Financial Secretary to the Treasury, and the report follows detailed consideration of the Civil Appropriation Accounts, 1958-59, and the report of the Comptroller and Auditor-General, Sir Edmund Compton, which was published on March 1 and detailed in 'The Builder' of March 18.

Sir Edmund Compton reported that many major road schemes had shown considerable increases over the provisional estimates of cost on which the Treasury first authorised commitments and even over reasonably firm estimates made after detailed preparation. The Committee state that they examined the four schemes on which the Comptroller had reported—the Runcorn-Widnes Bridge, Preston by-pass, the Cromwell-road extension, and the first section of the London-Yorkshire motorway (M1). The Ministry of Transport had told them that the provisional estimates which proved so inadequate were really no more than 'inspired guesses' made to indicate the order of magnitude of the schemes at the stage when the Treasury were asked to authorise preparatory work. The Committee were also concerned to note that large increases occurred on estimates given after completion of the site survey and other detailed preparatory work.

They appreciated the difficulty of estimating for major schemes of which the Ministry and the consulting engineers might have had little or no experience, but they doubted whether financial control could be effectively exercised on the basis of estimates which proved so wide of the mark. Moreover, they were informed that where a major scheme proved to be much more expensive than expected it was normally necessary to put back the date of other schemes. In the Committee's view deferment of a scheme ready for execution was not conducive to economy.

'Weakness in Control'

They go on to state that the Comptroller's report and evidence taken by them had disclosed certain weaknesses in the control of schemes carried out by consulting engineers. The report then details what happened over M1, when, in April 1959, the Ministry informed the Treasury that the estimated cost had risen from their first firm estimate of £16.4m. to £19.4m.

The Ministry attributed a great part of this to wet weather. To counteract the effect of the weather and to permit of winter working the Department had agreed to expenditure of about £300,000, mainly for embankments, and in January, 1959, they had learned from the consulting engineer that this work was expected to cost £574,000. But it was not until March, 1959, that they were made aware that these measures had cost upwards of £1m. and that expenditure on other winter working measures had been necessary to the extent of £500,000.

The Ministry admitted that experience had shown that they had relied to a greater extent than desirable on the consulting engineer to keep them informed, but they explained that never before had they had a scheme of such magnitude to be completed at such speed. The Ministry's own engineers were not in really close touch with the scheme and the consulting engineer had undertaken heavy additional liabilities without informing the Ministry. There had, moreover, been undesirable delay even in informing the Ministry of the way the cost was increasing. The Ministry considered, however, that although they might conceivably have taken decisions different from those of the consulting engineer, they would not in the event have taken a different line and that his decisions were the right ones.

The Committee were concerned, nevertheless, to learn that very large expenditures were undertaken without the knowledge of the responsible Department and therefore without them being in a position to exercise any influence on the decisions leading to the expenditure.

Periodical Reports

It was, the Committee understood, now the Ministry's general policy to use consulting engineers for the construction of motorways extending over more than one county. They noted that the Ministry intended to ensure for the future that they were consulted before any important decisions were taken by the consulting engineers. To this end the Ministry would lay down clearer instructions on periodical reports and emphasise the necessity for consultation on any alterations likely to have a material effect on costs.

They had been told that a 'Motorways Branch' had been recently set up in the Ministry which would have a representative on the site the whole time. State the Committee.—'We hope that these developments will speedily be effective and so implement fully the assurance given that the Ministry's control over consulting engineers is at least as close as that exercised over local authorities performing road construction work as agents for the Ministry of Transport.'

The Committee also inquired into the adequacy of the certificates given by consulting engineers in support of contractors' claims for payments. Experience had shown that in the absence of a standard form of certificate the amount of information furnished by consulting engineers with their payment certificates had varied considerably, and had sometimes been so meagre as to make it difficult for the Ministry's Finance Division to be satisfied from the certificate itself about the propriety of the contractors' claims.

'We consider this unsatisfactory,' states the report. The Committee were informed that the Ministry had been discussing with the Association of Consulting Engineers a code of instructions designed to standardise the information required to be furnished and to ensure that the department's requirements were met. They trusted that no time would be lost in bringing these discussions to a successful conclusion.

Fees to Consulting Engineers

Inquiry was also made into the Ministry of Transport's method of calculating fees to consulting engineers for the preparation and supervision of road and bridge schemes. They were assured that the fees paid by the Ministry under the agreement with the Association of Consulting Engineers—of which not all consulting engineers were members—were more favourable to the Exchequer than those charged by consulting engineers on private schemes. The Ministry had no information on the fees paid for very large private schemes, but thought that special rates might be negotiated in particular cases. Many of the Ministry's schemes, particularly for motorways, cost much more than £1m. which was the point where the present scale of fees flattened out. The committee doubted whether such large projects were envisaged when the agreement with the Association was made many years ago.

The Treasury had agreed to review the system and furnish a further statement. The committee recommended that the matter should be further considered when the Treasury statement was available and its contents had been studied.

The Committee also report that they were informed that there was no competition in the choice of a consulting engineer for a particular project but that the Ministry were satisfied that their selection ensured that the best firm was entrusted with the job, and that the work was spread fairly among consultants. There was, moreover, no competition related to the design and specification of the work to be undertaken although the Committee supposed that this must be a major factor in costs.

The chosen consultant was completely responsible for planning and designing the scheme, subject to general conditions

laid down by the Ministry as to the standard to which it was to be prepared and planned. It rested with the Ministry's engineers, with whom the consultant worked closely during the planning stage, to ensure that design and specification were economical and up-to-date.

States the report: 'It appears to us that the present arrangements for appointing and remunerating consulting engineers must entail in some degree the risk of encouraging extravagant design and of adding unreasonably to the remuneration. The Treasury regard it as their function to ensure that Departments employing consultants keep in line in the matter of fees, and that all Departments secure the benefit of any modification which one or the other may have achieved. We recommend that the Treasury should initiate further action by the interested Departments to deal with the defects in the present arrangements.'

Hospital Building Costs

THE COMMITTEE OF PUBLIC ACCOUNTS then went on to draw three conclusions from the 'unfortunate affair' of a reconstruction scheme at a teaching hospital, approved by the Treasury in December, 1955, at an estimated cost of £80,000. They recounted how on April 1, 1959, the Ministry of Health were informed by the Board of Governors of the hospital that opening up the structure had revealed weaknesses not shown in old drawings.

The architects for the Board were authorised to consult structural engineers who recommended that work should be stopped. The terms of the report suggested that expert superficial examination before the work started would have caused doubt as to whether the building would bear the additional load entailed by the scheme. After further reports by the engineers and an independent consulting engineer called in by the Ministry, the Board concluded that it would be more satisfactory and no more costly to erect a new building, and that the old building should be reinforced only so far as necessary to provide a limited life, the fourth floor being sealed off and abandoned.

The total cost of the abortive scheme was £41,109 of which £27,472 fell to be borne by Exchequer funds. In April, 1959, the Comptroller and Auditor General asked the Ministry if the Board had been advised whether any claim in respect of the loss incurred lay against their professional advisers, but this question was still unresolved at the time the Committee of Public Accounts took evidence. It appeared that no investigation had been initiated to decide where responsibility lay until the Comptroller and Auditor General made his inquiry in April, 1959, and that in the succeeding 12 months no decision had been reached.

The primary responsibility for this abortive scheme lay with the Board and the professional advisers employed by them. The Committee were informed that the Ministry of Health exercised no control over the selection of the professional advisers of hospital boards. Even in the particular case under notice, where the responsibility for the abortive expenditure was still undecided, there had been no intervention by the Ministry and the Board were continuing to employ the same architect not only for the work of making the old building safe but also for planning the contemplated new building.

The three conclusions were: 1.—There should be no delay in investigating responsibility for the waste of public money. 2.—When dealing with old buildings about which information might be lacking or misleading—and presumably there were many such buildings in the hospital service—no alterations should be authorised until the Ministry had assured themselves that the stability of the building would not be affected. 3.—The Minister should advise hospital boards that they should not continue to employ professional advisers whose competence was in question, until such time as investigation showed that the professional advisers were not at fault.

The Committee also reported that they had inquired on the progress made by the Ministry of Health in laying down building standards to be used in carrying out the large hospital capital programme. The Ministry were developing three lines of approach to this end. They were preparing bulletins on particular departments of hospitals, working on cost analysis of schemes with the aim of producing cost targets and planning to build some typical units themselves to demonstrate the latest standards of layout and the possibility of achieving those standards within the cost limits that they recommended.

The Committee welcomed these activities, trusted the Ministry would pursue them and make full use of experience gained elsewhere, notably in connection with school building and in private contract building, on the value of standard designs and standard costs. There was however plenty of scope for hospital boards to make their own individual contribution towards economical and efficient planning of new buildings.

Ministry of Works' Expenditure

THE COMMITTEE noted with satisfaction that the Ministry of Works were investigating the charges made to private clients by outside architects and other professional advisers with a view to making comparisons with their own departmental costs. They trusted that the results of the investigation would be available in time for consideration by the Treasury in the course of the proposed review of the Ministry's staffing arrangements.

The report then recounts in detail what happened in the construction of a research establishment in Cumberland for the then Ministry of Supply, which was carried out by the Ministry of Works as a repayment service. The main contract was let in December, 1956, on a prime cost basis plus a fee on a sliding scale fixed after completion. Cost was provisionally estimated in January, 1956, but a more detailed estimate in August, 1957 gave a provisional total cost of £10.9m. The estimate rose to £14.8 in April, 1958 to £17.5m. in December, 1958 and to £20.4m. in July, 1959 when the Ministry were of opinion that the total cost as then defined might go to £25m.

In 1958 when it became obvious that the total estimated cost would be exceeded, the Ministry made a detailed review of the consortium's financial control system, and an inquiry into the whole financial position was held by a senior officer in the summer of 1959. Where weaknesses were found, as in the major sub-contracts where the control system had fallen into arrears, steps were taken to eliminate them.

It was clear, states the Committee's report, that the system used for controlling expenditure suffered from the basic defect that it depended for the essential figures on the main contractor, consisting of a consortium, which had largely subcontracted the work to its own member firms or subsidiaries. The Ministry admitted that the necessary information did not, at any rate in the early stages of the project, come through as quickly as it should have done for the Ministry's control to be effective. The Committee were therefore glad to know that action had been taken to tighten control procedures.

In the opinion of the Committee it was essential in cost-plus contracts that Departments should not only exercise close control over progress but should also make arrangements which ensured that administrative and financial control of commitments was retained in their own hands. They accordingly recommended that this should be the rule in future.

Historic Buildings

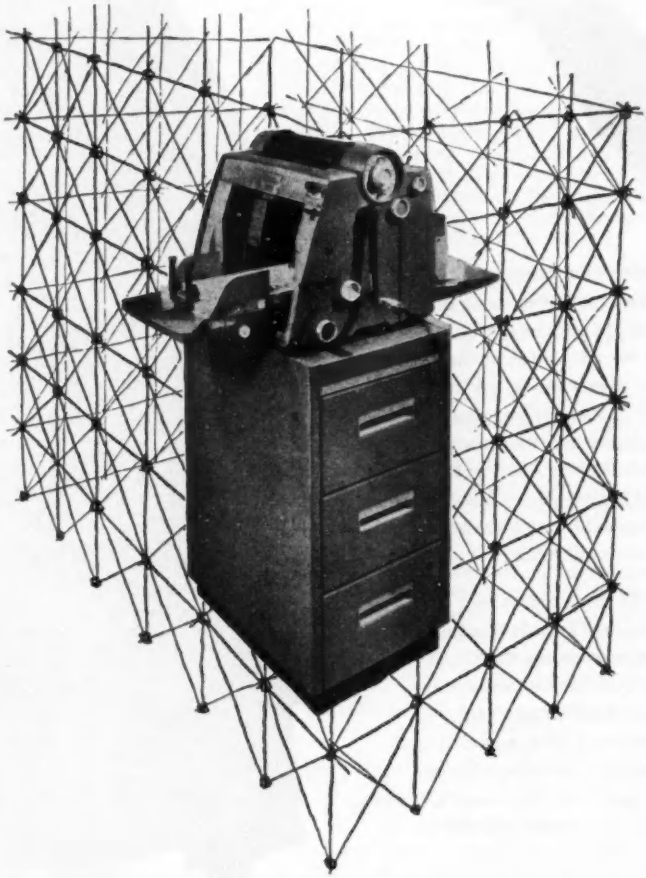
Lastly the Committee of Public Accounts dealt with grants towards the acquisition and maintenance of historic buildings and ancient monuments, recalling how the Comptroller and Auditor General had drawn attention to cases where the initial estimates of the cost of repairs were apparently based on incomplete or superficial inspection of the building or included inadequate allowance for the likelihood of underlying defects. They were informed that of 611 grants up to December 31, 1958, 178 had been increased by the end of 1959. The Ministry of Works had explained that exact estimating was difficult.

The Ministry had agreed that once a grant had been made on the basis of costs which later turned out to have been underestimated, it was difficult to refuse further claims for grants if the money already spent was not to be wasted.

It was of fundamental importance that a realistic estimate of total costs should be obtained before the initial grant was made. The past record was far from satisfactory and the Committee welcomed the measures taken by the Ministry to improve estimating. The Committee noted the view of the Ministry that there was no end in sight of these grants for historic buildings. They were, therefore, glad to know that the arrangements for Treasury control of the grants were under review, and they recommended that the review should be extended to settling the standards by which buildings would qualify for grant as being of outstanding historic or architectural interest.

GOING UP

Wherever business thrives
Gestetner thrives . . .
Solving problems of information
and communication.



The success of a building project, depends to a great extent on efficient liaison between site, office and suppliers. Gestetner can prove invaluable here . . . turning out a supply of crisp, clear copies of estimates, specifications, bills of quantity, in no time at all. With the aid of electronic stencils the same machine can produce facsimile copies of drawings, diagrams, sketches, photographs—with the minimum of fuss and bother.

Gestetner

Send now for full details of Gestetner machines, the Gestefax table-top electronic stencil scanner and the Gestefax quick stencil service.

Gestetner Limited,
Gestetner House, 210 Euston Rd., London, N.W.1 EUSton 7021

Do you lose buyers on the toss of a coin?

People won't have to toss up to decide which of so-much-alike houses to buy if yours have a big sales plus. And there is no better sales plus in these days when people are so big-window, fuel-saving conscious than double glazing. Fit "INSULIGHT" Double Glazing Units in the windows of the houses you're building, and give them the big sales advantage you are looking for.

For full information on "INSULIGHT" Double Glazing Units, consult the Technical Sales and Service Department, Pilkington Brothers Ltd., St. Helens, Lancashire (Tel: St. Helens 4001) or Selwyn House, Cleveland Row, St. James's, London, S.W.1. (Tel: WHItehall 5672-6).

fit

"INSULIGHT"

Double Glazed Windows

Supplies are available through the usual trade channels. "INSULIGHT" is a registered trade mark of Pilkington Brothers, Ltd.

Activity in the Building Industry

Rising Demand for Industrial and Domestic Development

Building provided most of last year's increase in fixed investment, states the Treasury's Information Division in the July issue of its monthly review of the economic situation, 'Bulletin for Industry.' Output of the construction industries increased steadily and order books expanded. Demand has continued to rise, particularly from industry and from private house developers.

Ten-year Review

OUTPUT by the construction industries rose by 28 per cent from 1948 to 1959 (this compares with an increase of 48 per cent in manufacturing industry). Setbacks to the industry's expansion occurred in 1950-52 and 1957-58. In the first of these periods demand from private persons was cut back to make room for defence building, and delays were imposed on starting dates of many types of project—the industry at that time was controlled by Government licensing. In late 1954 building controls were abolished.

Output was steady in the exceptionally bad weather of 1955, but by the end of the year signs of overload, notably shortage of labour and reinforcing rods, had appeared. In 1957-58 the credit squeeze held back the industry's expansion and local authority housing, which had reached its peak in 1953-54, continued to decline substantially (the general housing subsidy had been withdrawn at the end of 1956). Private housebuilding accelerated in 1952, and by 1958 nearly half the houses completed were for private owners.

From 1948 to 1959 the volume of gross fixed investment in dwellings and other new building and works rose by about nine-tenths. The investment total rose—with an interruption in 1951—until 1956, was then stable until 1958, and rose again rapidly last year:

(£m., 1954 prices, gross fixed capital formation)

	1948	*1950*	*1951*	*1954*	*1957*	*1958*	*1959*
Dwellings	425	408	399	644	539	508	577
Other new buildings & works	364	518	501	611	828	852	906
Total	789	926	900	1,255	1,367	1,360	1,483

The main components moved, however, rather differently. Investment in dwellings has increased much less over the period than other forms of investment and has fluctuated more within it; in 1948 dwellings made up 54 per cent of the total, in 1959 39 per cent. The peak investment in dwellings was in 1954; there was then a repid decline until 1958, which was reversed in 1959. To this increase was added a further growth in investment in all other new building and works, which in 1959 was one-and-a-half times greater than in 1948.

Something like a third of building output is on repairs and maintenance. This work, which is not included in gross fixed investment, has not changed much in volume over the years. Its value in 1959 was £772m., out of a total output by the construction industry of £2,399m.

The volume of fixed investment rose 4½ per cent in 1959 on 1958, with most of the increase coming from building investment. The rise continued into 1960. In 1959 the construction industry raised its output by about 6 per cent and there was a further sharp rise in the first quarter of this year.

Housing

Investment in dwellings was about an eighth higher in 1959 than in 1958 and accounted for half of the rise in total fixed investment. The increase was all in private housing, which was on a strongly rising trend during the year; local authority housing, which had been falling sharply in earlier years, was about level. In the first quarter of 1960 there was a slight fall in local authority housing and no significant change in private:

(gross fixed investment in dwellings, £m., 1954 prices, seasonally adjusted)

	Quarters						
	1958		*1959*				*1960*
	1st	*4th*	*1st*	*2nd*	*3rd*	*4th*	*1st*
Public	63	56	60	59	60	62	61
Private ...	63	73	78	81	84	92	94

The value of new orders obtained by contractors for new housing points to a further rise in housebuilding this year, with the bulk of the extra demand coming from private developers. The £62m. worth of orders placed by public authorities in the first quarter were much the same as in each of the previous three quarters and rather less than a year earlier, when, however, the Government invited local authorities to start houses they could complete within the current twelve months. Orders placed by private developers were double the public figure and 12 per cent up on a year earlier.

(£m., new housing orders obtained by contractors for new work, quarterly)

	1959				*1960*
	1st	*2nd*	*3rd*	*4th*	*1st*
Public	72	65	57	61	61
Private	118	97	105	115	132

Other Building

Investment in other new building and works rose by 7½ per cent in 1959, accounting for a half of the total rise. The trend within the year and into 1960 was strongly upwards:

(gross fixed investment in other new buildings and works

	Quarters						
	1958		*1959*				*1960*
	1st	*4th*	*1st*	*2nd*	*3rd*	*4th*	*1st*
£m., 1954 prices	219	239	223	223	241	272	266
% rise on year earlier ...	1	2½	2	2	8½	14	19

Public sector building (other than housing) was rising last year; it did not change much in the first quarter, but the figures for new orders suggest that some further increase may take place later this year. Private building turned upwards in the second half of last year and the upward trend has continued.

Orders obtained by contractors suggest that they are going to be busier than ever before on non-housing work of all kinds. Public authorities placed orders in the first quarter worth £135m. (£34m. more than a year earlier) and private developers £149m. (£38m. more). The main increase in the latter was in building for industrial purposes:

(£m., new orders obtained by contractors for new non-housing work, quarterly)

	1959				*1960*
	1st	*2nd*	*3rd*	*4th*	*1st*
Public	101	106	95	121	135
Private	111	120	110	128	149
Industrial ...	55	63	55	68	82
Miscellaneous*	56	57	55	60	67

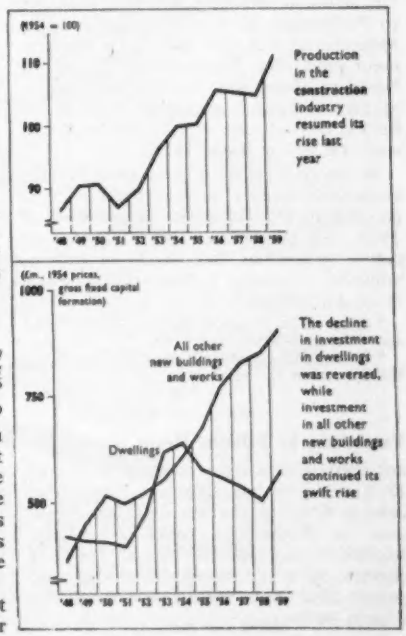
* mainly commercial, *e.g.*, shops, offices.

The load of work has been growing fast and seems likely to continue to do so. Expenditure on local authority housing in 1960-61 is expected to be higher than in 1959-60 and private housing is increasing rapidly. Industrial Development Certificates show a sharp rise in the first quarter of 1960 on a year earlier while public sector non-housing work is expected to be considerably higher in the current financial year than in 1959-60.

Pressure on Supplies

There is some unemployment in the building industry, mainly in parts of the North-East, South-West, Wales and Scotland. Elsewhere unemployment is extremely low: there are many shortages of craftsmen, particularly carpenters and bricklayers, and this is the case even in areas where other labour is available, as in Scotland, for example.

Supplies of most materials increased during 1959 but local shortages of bricks were reported and there were delays in deliveries of reinforcing rods. This year supplies of bricks have been increasing (output in the first five months was 12 per cent up on a year earlier) but labour shortages have been a hindrance;



reinforcing rods are being produced at a rate sufficient to meet most of the expected needs. There have been local shortages of cement but this year cement has been imported and the industry has the capacity further to raise output.

Demand on the resources of the building industry are rising. Requirements of manpower, particularly craftsmen, and of some materials, are likely to press hard on supplies. But the restraints on credit and the levelling out of public investment should help to bring demand and supply into better balance.

Breach of Safety Regulations

Firm Fined £150 for Scaffolding Deficiencies

BUILDING WORKMEN who worked on a bonus basis and failed to comply with all safety precautions, which 'took too much time,' were blamed for the appearance before the Dudley Court on June 17 of a well-known Sedgley firm of builders.

Tomlinson Brothers (Sedgley), Ltd., of Bilston-street, admitted five breaches of the Factory Act. It was stated that toe boards were not provided on scaffolding, a ladder was not securely fixed, guard rails were not provided, putlogs were not securely fastened and no report of inspections of the scaffolding had been recorded.

MR. DONALD H. LIVESEY, factory inspector, said the firm was building council houses on the Russell's Hall Estate, Dudley, and all the charges arose from a routine inspection on April 21. At the time three bricklayers and two labourers were working on scaffolding round a pair of partly-built houses on a platform 12 ft. from the ground. A register which was kept in the foreman's office of examinations of the scaffolding had not been filled in since February 2. The firm had been previously warned about contraventions of the Act.

'I know they have difficulty with labour, but my department is determined that accidents on building sites, which are on the increase, shall be stopped. It is only by complying with the regulations that we shall get a decrease,' added Mr. Livesey.

MR. A. F. SOUTHALL, for the firm, said they had started business in 1908 and it was the first time they had been prosecuted for such offences. It was very difficult to persuade workpeople to abide by the regulations. They had been working on the Russell's Hall Estate for two years and had erected 400 houses out of a 500-house contract. In that time the only accident had been pinched thumbs and bruised toes caused by bricks falling from lorries. He explained that it was the custom of bricklayers, of which there was a grave shortage, only to work in gangs on a bonus basis. To comply with all the regulations took time and their object was to get on as quickly as possible. Mr. Southall commented that for the slightest of reasons the gangs would leave and go to work for someone else. This the gang did as soon as they heard there was any trouble

The firm was fined a total of £150 on the counts.

Housing Progress Report

Increased Completions in First Half of 1960

THE HOUSING PROGRESS REPORTS presented to Parliament as White Papers* by the Minister of Housing and Local Government and the Secretary of State for Scotland show that the number of permanent houses completed in Great Britain during June was 27,348 compared with 24,266 in June, 1959.

In the first six months of 1960 143,934 permanent houses were completed compared with 130,016 in the same period of 1959. Of these 65,263 were erected by public authorities and 78,671 by private builders. Detailed figures will be given in an early issue.

* Cmd. 1119 Housing Return for England and Wales, HMSO, price 9d.
* Cmd. 1112 Housing Return for Scotland, HMSO, price 1s. 3d.

Vandalism by Stiletto Heels

ROTHERHAM EDUCATION COMMITTEE on July 27 decided to ban footwear that would damage floors in the new £600,000 extension to Rotherham technical college. Architects had reported that all the floor finishes, with the exception of clay and quarry tiled floors, would be damaged by stiletto heels.

Marking School Floors

Leather Substitute Soles Blamed By Architect

USE OF SUBSTITUTE MATERIALS for the soles of boots and shoes instead of leather is to blame for the considerable marking which occurs on floors in new schools. This is the view of the Surrey County Architect, Mr. J. Harrison, FRIBA, who has been looking into the matter at the request of the county's North Western Education Executive. Composition floors, he says, do not show marks so readily as timber or asbestos cement flooring. Although floors could be preserved and more readily cleaned if treated with impervious materials, the treatment was comparatively expensive and had to be renewed constantly. The executive have asked the Surrey County Council to draw the attention of the appropriate authority to the disfigurement, with a suggestion that research should be carried out to find a more satisfactory material.

Oxford Timber Course

THE NEXT one-week timber course arranged by Dr. H. E. Desch, FRICS, will be held at Oxford from September 19 to 24. Further details may be obtained from the secretary at 11 Haymarket, London, SW1.

Future Earning Capacity

Builder Awarded £5,000 for Loss

From a Legal Correspondent

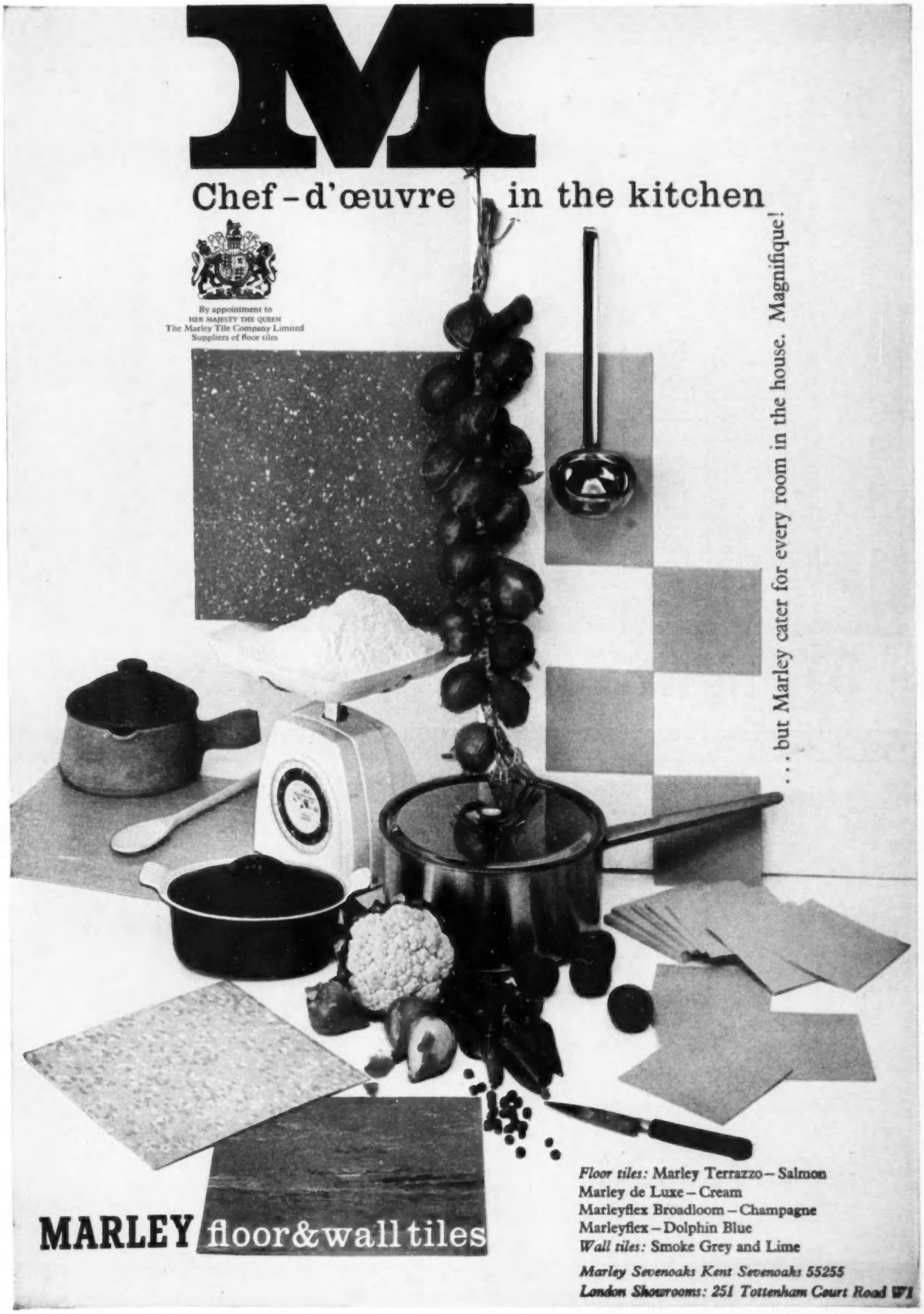
AN IMPORTANT DECISION for builders, and indeed for all others who have suffered loss through injury, is contained in the recent decision of Mr. Justice Streatfeild in *Pope v D. Murphy and Son Ltd.* The plaintiff, who was a master builder trading under the name of Towers and Pope, employed 7 skilled men and 2 labourers and his work included decorations, ordinary maintenance and private surveys for clients. His profits were in the region of £750 a year.

Before his injury he had thought of selling his business and carrying on in the building trade as a foreman or in some managerial capacity, but the court for the purpose of this action considered that he would have continued as a master builder. He was injured in a car smash due to the negligence of the other driver employed by the defendant's firm who was killed. Apart from damages for physical injuries, pain and suffering, etc., the plaintiff was entitled to payment for loss of future earning capacity under the principles laid down in *Benham v Gambling*.

The important point at issue in *Pope v D. Murphy and Son Ltd.* was whether this sum was to be calculated having regard to the reduced expectation of life due to the accident, or to the period of time the injured man might have expected to earn if there had not been an accident. In an earlier case, *Harris v Bright's Asphalt Co. Ltd.*, Mr. Justice Slade had come to the conclusion that damages for future earnings could only be based on what expected span of life was actually left to a man based upon his injuries. It was in fact argued by the defendants that the court did not compensate a dead man so why compensate a living man beyond his actual expectation.

Mr. Justice Streatfeild, however, having regard to a number of decisions, had no hesitation in deciding that the basis of compensation should be the expectation not taking into account the injury. Slade J.'s view was criticised in Kemp and Kemp on Quantum of Damages in the following words: 'Why should the wrongdoer be freed from compensating the plaintiff for the pecuniary loss which he has caused him just because at the same time he has also shortened the plaintiff's life?'

In reaching the decision as to the amount payable the court had of course, not merely to multiply an annual payment by a certain figure, but also to make allowances for some of the contingencies of life—possibility of other accidents, supervening bankruptcy, etc. The difference between the two methods of ascertaining loss of earning capacity was between £5,000 and £2,500. The learned judge awarded £5,000 under this head, but if the claim was reduced by a superior court to take into account the injuries, he would have awarded £2,500.


M
Chef-d'œuvre in the kitchen
By appointment to
HER MAJESTY THE QUEEN
The Marley Tile Company Limited
Suppliers of floor tiles
. . . but Marley cater for every room in the house. Magnifique!
Floor tiles: Marley Terrazzo – Salmon
Marley de Luxe – Cream
Marleyflex Broadloom – Champagne
Marleyflex – Dolphin Blue
Wall tiles: Smoke Grey and Lime
Marley Sevenoaks Kent Sevenoaks 55255
London Showrooms: 251 Tottenham Court Road W1
MARLEY floor&wall tiles

A new development in the Lightweight Concrete field

LYTAG

lightweight aggregate

LYTAG is used for...

Structural Grades of Concrete

Precast Concrete Blocks

In situ Roof and Floor Screeding

Refractory Concrete

Lytag provides Resistance to weather, Low U value, Resistance to fire and High Compressive strength.

Lytag is a lightweight aggregate produced from pulverised fuel ash by a carefully controlled sintering process. Spherical in shape, it has a slightly roughened surface so providing an excellent key for the adhesion of cement.

It has been the subject of close scientific scrutiny throughout its development.

A number of technical papers on the different uses of Lytag are available and will be forwarded upon request.

LYTAG LIMITED

Manor Way, Boreham Wood, Hertfordshire

Telephone: Elstree 2854

A LAING COMPANY

Building in the City

New Car Parking Standard Approved by Court of Common Council

THE COURT OF COMMON COUNCIL on July 28, granted planning permission on an outline application for the redevelopment of Moorgate underground station with upper level walkways and accommodation for offices and shops. The architect is Mr. Leo Hannen, 6 Woods-mews, Park-lane, W1.

They also (as briefly reported in our last issue) approved the establishment of a further redevelopment unit—No. 36—on just over an acre of land in Gresham-street and Aldermanbury. The proposals provide for the creation of a Guildhall precinct and extension, a public open space, and the widening of Aldermanbury. Total estimated cost of acquisition, clearing and preliminary work is £1,271,000, which the court authorised.

Car Parking

In future the car parking standard for office developments will be on the basis of one car per 2,000 sq. ft. instead of the present 2,500 sq. ft.

Recommending the new standard, the Improvements and Town Planning Committee, in their report to the Court, stated that the 1956 survey of the number of cars parked in the streets or on bombed sites showed a 56 per cent increase over the 1951 figure. 'And,' the report adds, 'there is every reason to believe that in 1960 the increase will be of the same order. This in itself would not necessarily be an argument for increasing the standard provision for car parking in office buildings, since no matter what the increase in vehicular traffic may be, there must be a limit set to the standard provision, not only in fairness to property owners and developers, but also to guard against the provision of parking space in excess of the facilities available for street movement.

'Nevertheless, we are inclined to the view that the 25 per cent increase in the standard now suggested by the County Council might be accepted as the standard now suggested by the County regarded as the fixed standard which is not likely to be further varied in the foreseeable future.'

The committee has since been advised that although the County Council must keep traffic conditions under constant review, it did not intend to vary the revised parking standard for offices in the next few years. In any event, if traffic conditions or any other consideration were to alter so much that it became essential to do so, the Council could consult the Corporation before adopting any new standard.

Developments Approved

The following developments were approved:

Drawings for:

The erection of an ancillary office building, for use in connection with the printing works of the Times Publishing Co. Ltd., on a site bounded by Queen Victoria-street, St. Andrew's-hill, Ireland-yard and Playhouse-yard and Blackfriars-lane (Ellis, Clarke and Gallannaugh, 37 Soho-sq., W1);

Erection of a new building for use as offices, showrooms, stockrooms, a dental surgery, shops, on the ground floor and one licensed premises and a basement car park, at Moor House, 49 to 53 and 61 to 71 Fore-street, 19 to 27 Fore Street-avenue, 1 to 15 Moorfields and part of Fore-street and Moorfields (Lewis Solomon, Kaye and Partners, Thavies Inn House, Holborn Circus, EC1);

Erection of a block of offices, at Temple House, site bounded by Cannon-street, Tower Royal, the northern boundary of the London Chamber of Commerce building, Queen-street, Queen Victoria-street, Sise-lane, the northern boundary of 5 Budge-row, and 71 Queen-street, incorporating the site of Budge-row (part), Watling-street, Sise-lane and Tower Royal (part) (Campbell-Jones & Sons, 9 Dowgate Hill, EC4);

Erection of a new building, comprising court room, livery hall, and offices on the third floor, at Painter Stainer's Hall, Little Trinity-lane (D. E. Harrington, 61 Frognal, NW3);

Erection of new comprehensive development, comprising one 12-storey block next to Seacoal-lane for use as offices, an eight-storey block next to Ludgate Hill for use as shops with offices over, an eight-storey block next to Seacoal-lane and a six-storey block next to Old Bailey for use as shops on the ground floor with offices over, the whole development having two basements to be used as a car park for 129 cars, restaurant, storage, etc., and three public houses, at Hillgate House, site bounded by Ludgate Hill, Old Bailey, Seacoal-lane and Ludgate-square excluding the London Electricity Board building in Seacoal-lane (Theo. H. Birks, 38 Portland-place, W1);

Erection of an office block, a public house, and a mechanical garage with a petrol service station, on site bounded by Upper Thames-street, Queen Street-place, River Thames and Public Cleansing Depot including vaults under Queen Street-place (C. Edmund Wilford & Son, 2 Green-street, W1);

Erection of a new building for use as a livery hall for the Worshipful Company of Salters, with ancillary offices, at parts of 17, 18 to 22, 23, 24, 25, 26 and 27 Fore-street and part of 3, 4 and 5 Aldermanbury Postern and 129a, 130, 131a, 131b and 131c London Wall (Easton & Robertson, Cusdin, Preston & Smith, 53 Bedford-square, WC1);

Erection of new buildings for use as offices, with restaurant or shops at the level of the pedestrian area and incorporating licensed premises and a post office on the Queen Victoria-street frontage; and a car park beneath the pedestrian area, on site bounded by Carter-lane, Knightrider-street, proposed forecourt about St. Nicholas Cole Abbey, Queen Victoria-street and the western boundary of St. Paul's vista (Campbell-Jones & Sons, 9 Dowgate Hill, EC4.).

Drawings and details of materials for:

Erection of a new building to be used as the offices of the international headquarters of the Salvation Army, at 97, 97a, b, c, and d, 99 to 107 and part of 109 Queen Victoria-street, part of 5 and 6 to 8 Lambeth Hill, part of 214 to 222 Upper Thames-street, Boss Court and parts of Lambeth-hill, Brooks-yard and St. Peter's Churchyard (H. & H. M. Lidbetter, 2 Verulam Buildings, WC1);

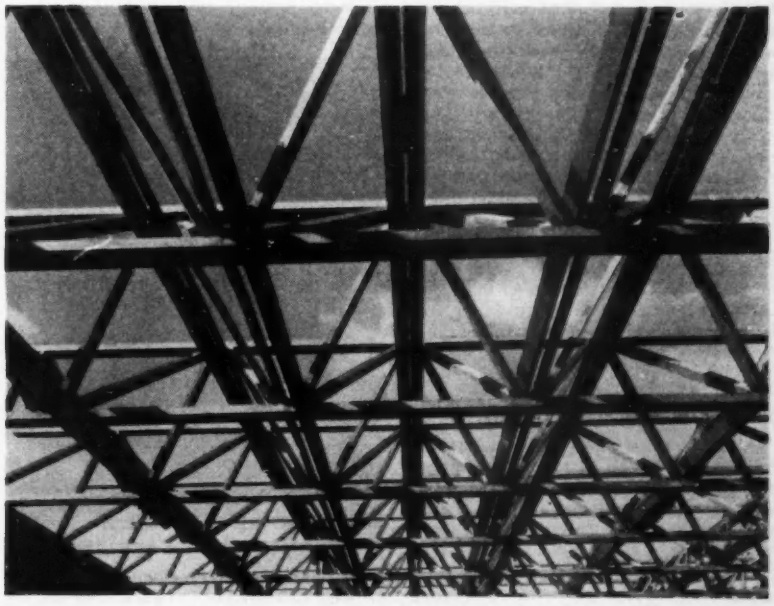
Erection of a multi-storey office building, at 61 to 64 (inc.), 65a, 65b, 65c, 66 and 67 Holborn-viaduct and land at rear situated over the disused railway station and 37 to 44 (inc.) Snow-hill (J. Seymour Harris & Partners, Carrara House, Embankment-place, WC2).

Permit the developments for:

Erection of a seven-storey office building to an extension to the Atlas Assurance Company offices in King-street, at 9 to 12 King-street, and 24 and 25 Ironmonger-lane (Campbell-Jones & Sons, 9 Dowgate Hill, EC4);

Erection of an office building, comprising sub-basement—storage and boiler room—basement car park and storage, and ground, 1st to 5th floors—offices, at 13 to 16 George-street, (Messrs. Joseph, 10 Lowndes-square, WC1);

And erection of a six-storey office building with a shop on the ground floor and basement and provision for the parking of six cars and loading and unloading at the rear of the ground floor, at 191 and 192 Fleet-street and 1, 2 and 3 Chancery-lane (Venture Property & Development Co. Ltd., 3 Buckingham Palace-gardens, SW1).



Part of the flat timber space frame roof which has recently been completed for the Roebuck Infants' Schools, Hertfordshire. The roof, which covers some 2,500 sq. ft., is made up of trusses, canted over and jointed with transverse members. The roof was designed in collaboration between the Architect's Department of Hertfordshire County Council and Mr. S. Woolf, one of the TDA's consultants

The Week in Parliament

From Our Own Correspondent

The Summer Recess

THE FOLLOWING business was transacted before Parliament adjourned on July 29 for the summer recess. Both Houses will re-assemble on October 25 to complete the passage of a few minor Bills and for MPs to debate British Railways. Prorogation will take place on October 27, and the new session of Parliament will begin with the Queen's Speech on November 1.

Progress with Redistribution of Industry

'CONSIDERABLE progress has been made,' declared MR. REGINALD MAUDLING, President of the Board of Trade, on July 26, when he was reporting on the provision of employment in development districts under the Local Employment Act, passed earlier this session.

He added: 'If projects go ahead as planned, new jobs in prospect in these districts are about 74,000 against average unemployment over the last twelve months of 133,000. There are three places, Merseyside, Llanelly and Sheerness, which I hope to be able to take off the list in the near future. The delisting of these places depends on the outcome of applications for assistance at present under consideration but to avoid the frustration of further applications and to concentrate our efforts on the remaining Development Districts and Northern Ireland, I have decided not to accept any more applications for these three places. I am not at the moment proposing to add any places to the list.'

When MR. N. PANNELL asked the President to take into account the present difficulties confronting the motor industry, which might frustrate or delay the plans it had in Merseyside, MR. MAUDLING said he would. That was why he had not actually taken Merseyside off the list. The jobs in prospect amounted to 33,000 of which the motor industry accounted for 18,000.

In the four months since the Local Employment Act began to operate, there had been signs of a shift in the industrial balance of the country. In South Wales the Board of Trade considered that there had been a remarkable improvement, but the most difficult areas were Scotland, Northern Ireland and North-East England as well as certain coastal towns. There had also been no success in steering industry to the west country.

In questions on July 26, MR. HAYMAN, a Cornish member, stressed the importance of improved communications to the west country. Fourteen applications for assistance had been received from Cornwall, of which 11 were under consideration, stated MR. MAUDLING.

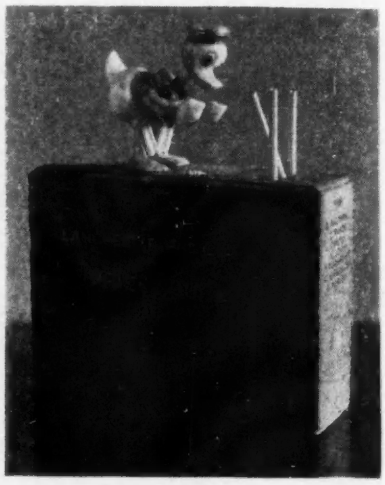
Issue of IDCs

MR. JAY asked the President of the Board of Trade what percentage of the total new factory space in square feet for which IDCs were granted in Great Britain was accounted for by the London and South-Eastern Region in the first half of 1958, 1959, and 1960, respectively; and what were the corresponding percentages for the Scottish, Northern and Welsh Regions, taken together.

MR. REGINALD MAUDLING: 'For schemes of over 5,000 sq. ft. in manufacturing industry the London and South Eastern Region's share was 20.2 per cent in the first six months of 1958, 17.4 per cent in 1959 and 9.7 per cent in the first three months of 1960. Corresponding figures for Scotland, Wales and the Northern Region combined were 20.1 per cent, 29.2 per cent and 16.2 per cent.

'The extent of the industrial location control was changed by the Local Employment Act; from April 1, 1960, the industrial building figures relate to a wider and non-manufacturing field of development. Under the new series, the proportions for the two areas for April to June, 1960, were 13.9 per cent and 12.7 per cent respectively.'

MR. JAY said there seemed to be an encouraging reduction in the share going to London and the South-East which he hoped would be continued. MR. MAUDLING said that broadly speaking no new manufacturing industry had come to the London area and the schemes in terms of square footage which had been approved had by and large been extensions which could not take place elsewhere. Taking this matter in terms of employment, which seemed what mattered, in the first three months of 1960 the figure for London and the South-East was 4.5 per cent and for the other area mentioned it was 22.6 per cent.



Lanchester & Lodge cricket team's office trophy which, after each match, is inscribed and presented to the player who makes a 'prize duck.' The XI had a recent win in a evening match played at Regents Park against a team from the office of Basil Spence & Ptnrs., scoring 70 for 5 wickets against a score of 50 all out

Housing in London

THE LAST SUBJECT to be debated in the longest sitting of the House of Commons since 1955 concerned London's housing problem. This topic generated much heat even though the discussion opened at 5 a.m. on July 27. Labour MPs directed their energies to the difficulties which they said had been created by the operations of the Rent Act, 1957.

There was also reference to the high cost of land, the amount of office building and rates of interest for council house building. MR. HENRY BROOKE, Minister of Housing and Local Government, when he replied at 6.20 a.m., immediately pointed out that he had never tried to minimise the difficulties of the housing situation in London which were greater than in any other city in Britain except Glasgow. London acted as a magnet. It was inevitably a place of high costs because the amount of land available was limited. Whatever they did, however they planned, whatever densities they fixed, London was a built-up area and therefore an area in which land prices were liable to be high and rents would always tend to be high.

There was no solution by way of reimposing rent control. They had to re-examine the whole of the London area to see whether they could find any additional land for housing purposes. They had to review all their planning arrangements. He was going to say they must review densities and he could go that far, but as members must know, the LCC review of the County of London Plan was now before him with certain proposals about densities and he must not make up his mind on these matters until the public inquiry had been held. He would certainly give very careful attention to whatever was said at that inquiry about densities.

Mr. Brooke recalled that his predecessor had amended a draft of the County of London Plan in 1955 so as to leave less space for commercial and office building and more space for housing, which was right. Since then a far tougher policy had been maintained and the figures showed that far fewer office permissions had been given in recent years than were given in the years before 1955.

Roads Programme to be Accelerated

WITH THE FIRM ASSURANCE that he would use all the resources of his department to see that new projects would meet the highest standards of design, MR. ERNEST MARPLES, Minister of Transport, announced in a debate on road traffic problems on July 28, that changes in the roads programme in England and Wales would involve an increase in Government expenditure from £65m. this year to £75m. next year and £88m. in 1962-63. Further increases in Scotland were announced by MR. JOHN MACLAY, Secretary of State for Scotland.

MR. MARPLES explained that the Government's decision to authorise an increased roads programme at once arose from a 'realistic calculation of the resources available.' Much of the increased resources to be devoted to the roads programme will go on road schemes designed

to relieve urban congestion. But it has also been decided to accelerate the rate of work on the five major projects which at present are receiving first priority.

Turning to the planning aspects of the roads programme, Mr. Marples said: 'It is clear that transport is going to dominate town planning. We have had some pretty bad examples of lack of provision for the increase in motor cars. The first new town allowed for eight cars to every 100 houses. That was not looking very far.'

He recalled that last December he had said the Ministry ought to have a long-term study group, and Mr. Marples went on to quote at length from what the 'Guardian' had called the best book on roads written by an Englishman and published in England. The last sentence of the quotation was: 'It is not traffic movement but civilised town life that is at stake.'

Appointment of Mr. C. D. Buchanan

For this long-term planning group, continued Mr. Marples, the man who wrote that book, Mr. C. D. Buchanan, ARIBA, had joined the Ministry of Transport and would form part of the permanent Civil Service in the Ministry to study the problem. He had made great efforts to get Mr. Buchanan into the Ministry and was sure that all serious MPs who studied this problem would agree that that was a good thing for the years ahead.

Mr. Marples explained that this year out of £65m. spent on roads, £16m. was allocated to classified roads. That was the weight of the effort they were making in the urban areas at the moment. The Government had decided for planning purposes that Government expenditure on classified roads, practically all of which would be spent in urban areas, should be fixed over the next five years at £150m. for England and Wales.

This meant that for the next five years the average grants to local authorities would be twice the present year's expenditure of £16m. But the local authorities would have a lot of work to do—planning, acquiring land and so on—so in practice it would mean that their rate of spending over the later years would rise to almost three times the present £16m.

Lessons from America

Mr. Marples said the biggest single contribution towards solving urban congestion was new and improved roads, but even so it might not by itself necessarily solve their problems. In Los Angeles, and some other American cities, they had the best roads he had ever seen, but they had destroyed the heart and soul of that city. He would not like to see that happen to London. Therefore they had to watch that carefully when they built urban roads.

Three points must be borne in mind. This work placed a great burden on local authorities who had to initiate the schemes and get engineers to work them out. Second, it was expensive—some of the land was not what would be called cheap. Third, it would take a long time to plan; the land had to be acquired and people rehoused.

Mr. Marples explained that the acceleration of the rate of work on the five major projects now getting priority would mean a substantial increase in expenditure on motorways, and their aim would be substantially to complete these projects, the major through routes, over the next five years and at least to start the Yorkshire motorway in the same period.

High Standard of Design

This would mean that by the middle 1960s these principal through routes would be second to none and would be fully adequate for the traffic for many years to come. He would use all the resources of his department to see that these new projects would meet the highest standards of design. Detailed programmes were now being worked out and he would announce the starting dates of the new schemes as they came forward. All this would mean a further rapid increase in expenditure on roads, directed at those points where it was most urgently needed.

Mr. Marples said that the local authority associations and individual highway authorities had asked to be given as much advance information as possible about the projects the Ministry would be prepared to consider for grant. In putting the larger programme into effect the Ministry intended to give all county councils and county boroughs what was called 'a rolling programme,' a programme for three successive years beginning with 1961-62.

By the end of 1960 they hoped to send highway authorities lists of the schemes for the next three years. They would be invited to apply to the Ministry for grants for all those schemes which they wished to carry out. In the course of 1961 they would tell them in good time of the programme for the fourth year and in 1962 the programme for the fifth year and always keep them three years ahead. 'It is utter folly to expect a local authority to plan annually,' he commented amid cheers.

Naturally there had to be flexibility. Some schemes would be done sooner than intended and others a little later. They would tell highway authorities how much they could expect to receive in grant in each of the three years and would give them considerable discretion in selecting the schemes to be carried out. This was evidence of some improvement in the way they intended to tackle urban congestion. In London they were discussing with the LCC an origin and destination survey of traffic. 'It will mean that when we ultimately plan an urban motorway in London—and we must have it—we shall put it in the right place.'

The Opposition's Views

The debate was opened by MR. MELLISH for the Opposition, who moved a motion that the House 'expresses grave concern at the growing traffic congestion and accident toll on the roads; condemns the Government for its failing to tackle this problem adequately; and calls upon it to prepare and carry through a comprehensive long-term programme designed to provide Great Britain with a safe and efficient transport system.' His complaint was that the Government would leave virtually unsolved the biggest problem—urban congestion.

The Opposition believed a Minister of State should be appointed to deal with roads and traffic and he should have certain powers, some of them now vested in the Ministry of Housing and Local Government. He should have powers to have under him a national highways construction board, a board with practical responsibility, not only for the planning of roads, but for seeing that they were built. He hoped the Minister would announce that there would be more comprehensive planning.

MR. MARPLES moved an amendment that the House, 'conscious of the importance of fast and safe road communications in an expanding economy welcomes the substantial improvements already made to the British road network, notes with satisfaction the determination of the Government to increase and intensify their measures to deal with the problem and pledges its support for all necessary action to eliminate traffic congestion and to improve road safety.'

'Spare Capacity' Allegation

He said that on seeing a report in the Press he immediately took up the complaint about lack of continuity in the use of machinery for road making and muck shifting. The measure of spare capacity in the industry was the eagerness of contractors to tender for work. He spoke as an ex-contractor. If there was no business about they got 20 people tendering. If the order books were full they got practically nil.

For the Lancashire section of the Birmingham-Preston motorway they put out to tender two sections and the amount of work was worth over £15m. They had three tenders for one and four for the other and of the four, three were the same as the tenders for the other half of the job. The firm that complained that its machinery was idle did not tender, yet it was that firm which told the Press that the work was not being given out by the Minister. The firm was free to tender or not, but it was wrong that that firm should say that it had machinery available and when tenders were put out, not to tender for work and then accuse the Ministry of not putting out orders. That was utterly disgraceful and he had told the firm so.

MR. MELLISH said there was not only one firm involved, but a considerable number as was shown by a census.

MR. MARPLES said that in building and civil engineering one must have regard not only to money but to making a technical assessment of the resources available, which included men, materials, machinery and management—known in the industry as the 'four Ms.' An architect in private industry would not allocate £1m. worth of work to a firm of contractors unless he knew it had the lot.

In all urban road schemes carpenters were needed. In the employment exchanges there were 5,250 vacancies for carpenters with 582 carpenters unemployed. They were having difficulty at the Hanger-lane underpass in getting the carpenters to do the work. That went for every region in the country.

This meant that it was no use thinking

of a monetary figure and saying that that represented the number of roads to be built. The monetary figure had to be translated into and equated with the materials necessary. However much money was allocated it was of no use unless that manpower position was corrected.

The Scottish Programme

MR. JOHN MACLAY, Secretary of State for Scotland, said that under the present programme he would authorise in 1959-60 and 1960-61 schemes amounting in all to about £7m. in the two years. The acceleration proposed would nearly double this figure in the following two years. During this period plans would be laid to enable the programme to continue thereafter at no less than this level.

By this accelerated programme they would be able substantially to complete a modern highway from Stirling to the border by the middle 1960s and during the same period plan and put in hand reconstruction of much of the Edinburgh-Glasgow and Inverkeithing-Perth roads and of the trunk road approaches to Kincardine Bridge. They would also continue with the widening of the remaining Highland trunk roads and give special attention to the problem of weak bridges.

Replying to the debate for the Opposition, MR. WEDGWOOD BENN said that although they welcomed Mr. Buchanan's appointment to the Ministry of Transport, the Minister knew he was not consulted when an office block was put up or when housing and other development took place. Was the Minister's announcement a new programme or just putting a date on an old programme that never had a date on it before? The Government had shown a studied refusal to plan. The RIBA wanted planning; everyone wanted planning, but the Government refused to plan.

In a division the Opposition motion was rejected and the Government amendment agreed to.

New Legislation on Fire Precautions

FIRE PRECAUTIONS are to be dealt with under the comprehensive legislation on the health, welfare and safety of persons employed in shops, offices and other premises covered by the Gowers report. The announcement of comprehensive legislation, for which the Minister of Labour will be responsible, was made by MR. R. A. BUTLER, Home Secretary, in a written reply on July 28.

He stated that it would not be possible to complete the preparation of this major measure in time to introduce it next session but the Government intended that the Bill should be introduced before the Offices Bill came into force at the beginning of 1962. The legislation would, in any event, cover shops, offices and those railway premises not already covered by factory legislation. The question of including other classes of premises covered by the Gowers report was still being examined.

Recent experiences in big fires in stores will (writes our Parliamentary Correspondent) be taken into account when the Government frame the new Bill. The Government are urgently considering the question of the responsibility for enforcement of the legislation, including responsibility for the enforcement of provisions relating to fire precautions, with a view to early consultations with the local authority associations and others.

It is understood that the Government are bearing in mind the need to avoid any sudden or undue burden on small employers or on national building resources. It is not yet possible to estimate the cost of legislation at this stage, particularly as improvements are taking place all the time regardless of legislation.

Although the Government co-operated in making the Offices Bill a workable measure, they consider that because of the form and limited scope of the Bill it would be better to overtake it by more comprehensive legislation than to begin consultations about regulations to be made under it. In addition to shops, offices and railway premises, the Gowers report covered theatres and other places of indoor entertainment, private catering establishments (boarding houses, etc.), road vehicle depots, coat depots and dental mechanics' workrooms. The Government are considering whether the proposed legislation should also cover these.

Private Streets

IN A written statement on the survey of private street works arrangements, MR. HENRY BROOKE, Minister of Housing and Local Government, on July 29 said his general conclusions from the survey were that there was no ground for any fundamental change in the law on this subject. He proposed to take the matter up with the local authority associations with a view to guidance being given to the local authorities.

Mr. Brooke stated that the survey, now completed, showed that there were at present about 54,000 private streets, that they were widely distributed throughout the country, and that during the next ten years local authorities hoped to make up 24,000 of them at a total cost of some £75m.

He went on: 'Local authorities may make up private streets under either the 1875 code or the 1892 code. The codes have to some extent been assimilated under the Highways Act, 1959, but there remain certain differences between them, the most significant being that under the 1875 code apportionment of the cost to frontagers is based on frontage alone, whereas the 1892 code enables the local authority to take account also of the differing degrees of benefits derived by the frontagers. Most local authorities have adopted the 1892 code, but some 200 still operate the 1875 code.

'Under both codes, local authorities have power to contribute from the rates towards the cost of the works. Some £300,000 has been contributed in this way in the past three years towards costs totalling £10m. Local authorities may accept payment by instalments. Under the Act of 1959, they may also contribute towards the cost apportioned to individual properties having only a flank or rear fronting the road.

'The 1892 code has provision for appeal to the magistrates on a wide variety of counts and, since the 1959 Act, this applies also to the 1875 code. Under both codes appeal may also be made to me. The survey shows that, of the 110,000 frontagers who have had charges made on them in the last three years, only 4,000 exercised any of the rights of appeal open to them. In areas where appeal to the magistrates was available, less than 5 per cent of frontagers exercised this right. Less than 1 per cent of frontagers appealed to me.

'The principle that the cost of providing new streets of a standard suitable for taking over as public highways should fall on the owners of the property which they serve has been long established and is, in my view, sound. The effect of the New Streets Acts, 1951-1957, is that the cost is now most often borne as part of the initial cost of acquiring the property. It must be remembered that many present owners have directly or indirectly met the cost of making up the roads serving their property. Moreover, the value of property served by a private street reflects the contingent liability for street works' charges, and much property has changed hands on this basis.

'I am aware that, in the case of an owner who bought his property before the war, the current cost of making up private streets results in a charge which is much greater than he then expected to pay. But the survey provides no evidence either that local authorities generally adopt higher standards or incur greater costs than are reasonable, or that the cost of making up private streets has increased to a greater extent than other costs involved in owning property—for example, repair costs. Generally speaking, the higher the cost the greater the growth in value of the house when the liability has been discharged.

'The existing law, if sympathetically administered, enables equitable results to be secured and provides means of mitigating hardship in the relatively few cases where that occurs. There is no evidence of general dissatisfaction or complaint among the persons affected. Such dissatisfaction as there is would be reduced still further if all local authorities took full advantage of the opportunities afforded by the law to deal with hard cases.'

Other Business

School Building

THE MAJOR school building programme in England and Wales will not be affected by the recent Government announcement that capital expenditure in the public section will be restricted next year to this year's level.

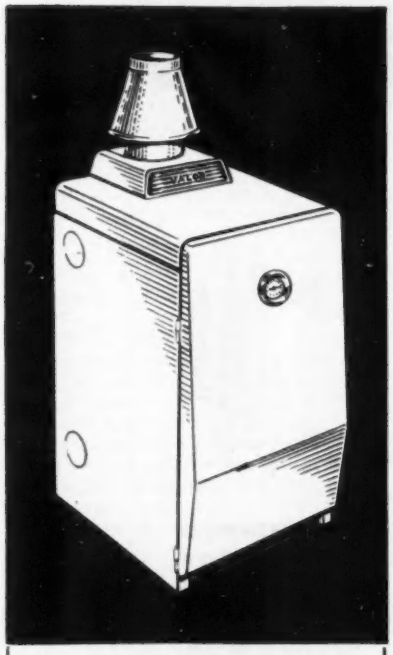
SIR DAVID ECCLES, Minister of Education, announced this in a written reply on July 21 to MR. FERNYHOUGH, who had asked what particular effect the announcement would have in Durham and on schools in general.

THE MINISTER said Mr. Fernyhough need have no cause for anxiety. The only

Just one of the reasons why more people are installing

Valor

oil-fired boilers



MODEL SA 45 has an output of 45,000 B.T.U.'s constant loading suitable for up to 9 radiators (220 sq. ft. surface) **and 30 gallons of hot water.** Maximum fuel consumption 3 pints per hour.

MODEL SA 35 has an output of 30,000 B.T.U.'s constant loading suitable for up to 6 radiators (150 sq. ft. surface) **and 30 gallons of hot water.** Maximum fuel consumption 2 pints per hour.

MODEL SA 25 has an output of 15,000 B.T.U.'s constant loading suitable for 2 to 3 radiators (50 sq. ft. surface) **and 30 gallons of hot water.** Maximum fuel consumption 1 pint per hour.

Why Valor leads the field!

- Small and unobtrusive
- Easy to install
- Highest recovery rate of any oil-fired boiler
- Burner gives extremely economical running on kerosine (paraffin) —does not require any electrical supply
- Oil control valve incorporates an anti-flooding safety device
- Thermostat controls hot water temperature
- White stove-enamelled steel casing complete with vitreous-enamelled draught-diverter
- Dial gauge thermometer on front
- Guaranteed for twelve months

Valor OIL-FIRED BOILERS

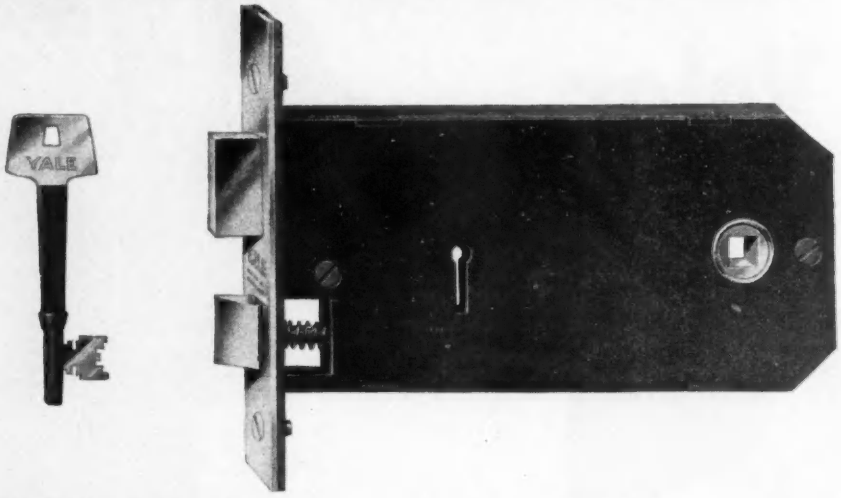
For further details please contact:
The Valor Company Ltd., Bromford, Erdington, Birmingham 24. Tel. Erdington 6151

NEW!

A COMPLETE RANGE OF

3 LEVER LOCKS

at a NEW LOW COST

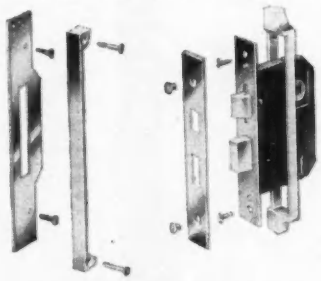


- **144 differs off levers alone (standard).**
- **350 differs off levers (if required).**
- **3,500 differs available off levers *and* wards.**
- **Follower holes brass bushed.**
- **Forend—armoured brass upper and steel lower.**
- **Deadlock bolts reinforced with hardened steel pins.**
- **Key—in line with "contemporary" design, the key is light and attractive—of nickel-plated steel, with nylon-covered shank to give durability and self-lubrication at the point of contact with the lock. Conforms with British Standard 2088 ("Performance Tests for Locks": Tests 7c (II) and 7d).**

This new range of 3-lever mortice locks enables you to specify greater security at a most moderate cost. The range—which includes both horizontal and upright type locks, two deadlocks and a sliding door locking latch—covers every need for a mortice lock.

Master keying. The locks can be master keyed in suites to include sub-masters, sub-grand masters and grand masters . . . and because all differs come from levers alone, a greater degree of security is assured.

Literature. Your local Ironmonger or Merchant will be pleased to show you this new range of locks and let you have a fully illustrated booklet.



THE YALE REVERSIBLE REBATED FOREND SET

This set enables Yale 3-Lever Mortice Locks *and* all other standard Yale plain forend mortice locks to be converted into fully rebated locks. The set is completely reversible for left or right hand, inward or outward opening doors.

Where there's a door there's a need for **YALE**

REGISTERED TRADE MARK

THE YALE & TOWNE MANUFACTURING COMPANY · BRITISH LOCK AND HARDWARE DIVISION · DEPT. C7 · WILLENHALL · STAFFS

change in the school programme for 1961-62 was indicated when Sir David added: 'There may be a small reduction in minor works in 1961-62 which I expect to be made up in 1962-63.'

Office Blocks in Suburbs

Questions on the number of office workers in London and the movement of them to and from the Metropolis were put to SIR KEITH JOSEPH, Parliamentary Secretary, Ministry of Housing and Local Government on July 25. He wrote that the Minister regretted exact figures were not available, but it was estimated that total employment in central London had been growing at an annual rate of 15-20,000 in recent years, and it was known that offices accounted for over half the total employment. Local planning authorities were receiving an increasing number of applications for permission to build office blocks in the suburbs and beyond.

SIR EDWARD BOYLE, Financial Secretary to the Treasury, stated in a written answer on July 25: 'Since the last war, rather more than 27,000 civil servants who would previously have been in London have been accommodated elsewhere. It is planned to move another 3,300 as soon as their new accommodation is ready.'

Earnings of Manual Workers

MR. EDWARD HEATH, Minister of Labour, stated on July 25 that the purpose of the new survey of earnings next October was to show for the first time since 1938 both the average weekly earnings of manual workers, and the distribution of individual earnings above and below these averages. Individual industries would be distinguished but not separate occupations or grades. It would not be practicable to relate actual earnings in engineering to rates fixed by mutual agreement.

Old People's Accommodation

MR. IREMONGER asked the Minister of Health on July 25 if he would make a statement on the progress in England and Wales with schemes for combining residential accommodation under Part III of the National Assistance Act, 1948, with the provision of specially designed local authority-built small houses or flats for elderly people who required only limited supervision.

MISS PITT, Parliamentary Secretary wrote: 'Welfare and housing authorities are showing increasing interest in the carrying out of joint schemes and a number have already collaborated for this purpose. Consideration is being given, with the Minister of Housing and Local Government, to the sending of a joint circular giving guidance to local authorities on this and other matters relating to accommodation and services for old people.'

Charing Cross Hospital

MR. KENNETH ROBINSON asked the Minister of Health on July 25 what negotiations or discussions were taking place regarding the disposal of the site of Charing Cross Hospital.

MISS PITT, Parliamentary Secretary wrote: 'None. It has not yet been decided how the timetable for building the new hospital might be phased, nor at what stage of rebuilding the hospital would be able to relinquish the site in the Strand.'

Purchase of Land for Housing

MR. MACKIE asked the Minister of Housing and Local Government on July 26 how far ahead he was prepared to allow borough councils compulsorily to buy land for housing.

MR. BROOKE wrote: 'Many factors affect the timing of the purchase of housing land by local authorities. These vary so widely that it is not possible to give a specific answer to this question. There is a limitation in the Housing Act, 1957, that land acquired compulsorily for housing should be needed within ten years of confirmation of the relevant compulsory purchase order, and subject to this I consider every order submitted to me on its merits.'

Case for Advance Factories

MISS HERBISON, asking the President of the Board of Trade on July 26, how soon he could give a decision on building further advance factories, commented that the Government should be getting on with the building of these factories and employing some of the unemployed building trade workers. MR. MAUDLING replied: 'I agree that I think the case is a strong one, and I hope to be able to do something fairly soon.'

Land Value Maps Rejected

MR. HEATHCOAT AMORY, former Chancellor of the Exchequer, wrote 'No' when asked on July 26 if he would take powers to enable district valuers to prepare and publish land-value maps for respective areas which they covered.

Main Sorting Office, Stoke-on-Trent

MISS PIKE, Assistant Postmaster-General, stated on July 27 that the scheme for a new main sorting office in Stoke-on-Trent had been cleared with the local authority. Close contact had been maintained with the BTC and the plans were referred to them some weeks ago. She added: 'Building should start about a year from now and be completed two years later. The building will be a modern one. The equipment will not include an underground conveyor, as this would be uneconomic. The site will be laid out attractively, retaining existing natural features wherever possible.'

Essex University Proposal

MR. RIDSDALE asked the Chancellor of the Exchequer on July 28 whether he was aware that a suggested site for the proposed University of Essex had been chosen without adequate opportunity being given to the representatives of north-east Essex to express their views: and what proposals he had received regarding plans for this university.

SIR EDWARD BOYLE, Financial Secretary to the Treasury, wrote: 'The University Grants Committee are considering an approach which has been made to them about the possible establishment of a University of Essex. I understand that the Essex Promotion Committee have considered a number of possible sites for a university (if it were decided to establish one) and are discussing the question with the University Grants Committee.'

Royal Assent to Acts

A Royal Commission, sitting in the House of Lords on July 29, signified the Royal Assent to a large number of Acts, including the following:

Finance, Offices, Clean Rivers (Estuaries and Tidal Waters), Caravan Sites and Control of Development, Road Traffic and Roads Improvement, Building Societies, British Transport Commission, Blackfriars Bridgehead Improvements, Tyne Tunnel.

Several Corporation Bills received the Royal Assent, many providing, among other things, for changes in local building by-laws.

Points from Replies

'Discussions are at present taking place between the two sides of the New Towns Whitley Council about redundancy, and I think it best to see what comes out of those discussions before reaching any conclusion.' *(Minister of Housing, July 26.)*

'Comparative figures on an average space of houses built on behalf of local authorities are available for three-bedroomed houses only. They are: 1947, 1,046 sq. ft.; 1948, 1,053 sq. ft.; 1949, 1,055 sq. ft.; 1957, 908 sq. ft.; 1958, 903 sq. ft.; 1959, 897 sq. ft.' *(Minister of Housing, July 26.)*

'I have no evidence that the rate of slum clearance in London is being affected by increases in the price of land.' *(Minister of Housing, July 26.)*

'At March 31, out of 1,469 housing authorities, one county borough and 298 other authorities had no houses either under construction or in approved tenders. In nearly all of these areas, however, private building was in progress.' *(Minister of Housing, July 26.)*

'The factors which are taken into account in considering applications for assistances under the Board of Trade Advisory Committee schemes are the requirements laid down in the Local Employment Act. Dominant among these are the location of the project, the employment it is likely to provide, the expenditure involved and the applicant's prospect of success.' *(President of Board of Trade, July 26.)*

'It is not yet established that in present traffic conditions the anti-dazzle screen on M1, which has been described as unsightly, is a proper provision, and pending further experience of the experimental installation the Minister does not propose to extend it.' *(Ministry of Transport, July 27.)*

'I am informed that the erection of the Forth road bridge is proceeding on schedule and that the contract date for completion is the end of 1963. There has been no change in policy as to the phasing of the Forth Bridge and Severn Bridge projects.' *(Minister of Transport, July 27.)*

THE BUILDER CURRENT PRICES

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials, not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. It is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£	s.	d.
Pit Ballast	per yd.	1	5	5
Pit Sand	"	1	3	8
Washed Sand	"	1	6	9
⅜ in. Shingle	"	1	4	3
¾ in. Broken Brick	"	1	0	9
Pan Breeze	"	1	0	6
Fine or Coarse Foamed Slag Aggregate	per ton	3	8	0

2 yds. of fine and 2.6 yds. of coarse per ton.

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

Best British Portland Cement. Standard Specification delivered Charing Cross area.

		£	s.	d.
6-ton loads and upwards, site	per ton	5	10	0
1 to 6 tons, site	"	6	2	0
Rapid-Hardening Cement in 6-ton loads and upwards to site	"	6	0	6
1 to 6 tons do. site	"	6	12	6

Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices.

Sulphate Resisting Cement. 32s. 6d. per ton on ordinary cement prices.

Red, Buff or Khaki Colorcrete in 6-ton lots	"	8	10	0

Other colours according to colour.

In 4-ton lots from 308s. 0d. to 778s. 0d. per ton.

White Portland Cement	"	13	15	6
Under 1 ton	per cwt.		16	9
417 Cement (Ultra Rapid Hardening) in 6-ton lots and upwards	per ton	7	2	6

Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.

Cullamix Tyrolean Finish, £11 8s. 0d. to £14 3s. 0d. (1-ton loads and upwards.)

Lightning and Ciment Fondu Brands High Aluminous cement, 6-ton lots and up	"	15	14	6
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	"	6	19	0
Stourbridge Fireclay, 6-ton loads (London sites)	"	7	7	0
Moler Mortar Powder for Flue Bricks (London sites)	per cwt.	1	10	0

BRICKS

Full Loads.

		£	s.	d.
First Hard Stocks	per 1,000	15	19	6
Second Hard Stocks	"	14	3	6
Mild Stocks (Kiln Burnt)	"	10	5	0
Mild Stocks	"	10	0	0

All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.

2½ in. Nominal Fletton Bricks to sites in W.C. district:

Commons	"	6	2	0
Cellular Commons	"	6	2	0
Keyed do.	"	6	4	0
Rustics	"	8	2	0
Cellular Rustics	"	8	2	0
Single Bullnose Commons	"	8	4	6
Sandfaced	"	9	2	0
Tuscans	"	9	17	0
Saxons	"	10	5	0
Golden Buffs	"	10	12	0
Dapple Light Facings	"	10	19	6
Heather Facings	"	10	15	0
Best Blue Pressed Staffs (London stations)	"	30	12	6
do. do. (London sites)	"	30	14	0
do. Bullnose (London stations)	"	31	11	6
do. do. (London sites)	"	31	13	0
Blue Wire Cuts (London stations)	"	27	5	0
do. do. (London sites)	"	27	6	6
Midhurst Lime Bricks (London sites)	"	11	0	6
Uxbridge Whites (London sites)	"	10	19	0
Special Purpose Sandlime Bricks (London sites)	"	8	12	0
Best Stourbridge Fire Bricks:				
2½ in. (London stations)	"	30	12	3
2½ in. (London sites)	"	31	1	0
3 in. (London stations)	per 1,000	36	14	9
3 in. (London sites)	"	37	5	3
2⅞ in. Moler Flue Bricks (London sites)	"	31	10	0
2½ in. Machine-made Sandfaced Red Facings (London sites)	"	17	11	6
2½ in. Machine-made Multi Red Facings (London sites)	"	17	16	6
2½ in. Hand-made Sandfaced Red Facings (London sites)	"	19	15	0
2½ in. Hand-made Sandfaced Multi-Colour Facings (London sites)	"	19	15	0
Hand-made Sandfaced Cherry Red Facings, Berkshire district (London sites)	"	19	13	0
Hand-made Sandfaced Multi-Colour Facings, Berkshire district (London sites)	"	19	13	0
Rubber Bricks for gauged arches (London sites)	"	49	1	3
2½ in. Surrey Clamp Burnt Multi Stock Facings (London sites)	"	15	6	6
2½ in. Surrey Kiln Burnt Multi Stock Facings (London sites)	"	16	7	0
Glazed Bricks (London sites), White, Ivory, Brown:				
Stretchers	"	64	0	0
Headers	"	63	0	0
Quoins, Bullnose and 4½ in. Flats	"	80	0	0
Double Stretchers	"	85	0	0
Double Headers	"	77	10	0
One side and two ends	"	87	0	0
Two sides and one end	"	89	10	0
Splays and Squints	"	83	0	0

Cream and Buff, £3 extra over White. Other colours, hard glaze, £8 10s. 0d extra over White. All above prices plus 32½% for Best quality and plus 32½% less 10% for Second quality.

PARTITION SLABS, etc.

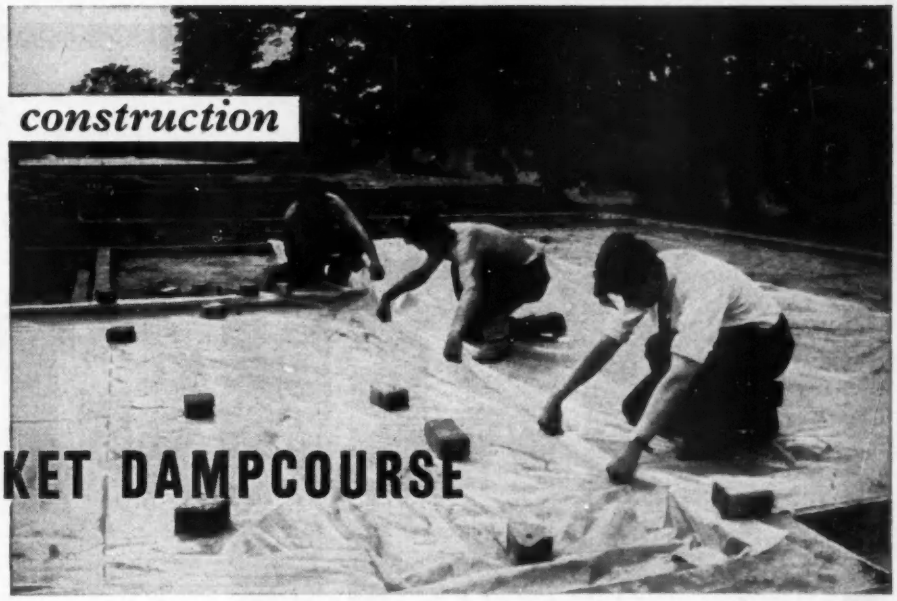
Delivered Central London Area. (W.C. District.)

			£	s.	d.
HOLLOW CLAY PARTITION BLOCKS (Keyed)					
Minimum lorry loads					
*2½ in.	140 yds.	per yd. sup.		4	6
BUILDING BLOCKS (Keyed)					
*3 in. (6 cavity)	110 yds.	"		5	7
*4 in. (6 cavity)	90 yds.	"		7	0
6 in. (8½ in. × 5½ in.)	1,250 blocks	per 1,000	27	13	0

* Half blocks at no extra charge.

CLINKER CONCRETE					
2 in.	100 yds.	per yd. sup.		3	9
2½ in.	85 yds.	"		4	4
3 in.	75 yds.	"		5	3
4 in.	55 yds.	"		6	5
CRANHAM TERRA COTTA					
2 in.		"		6	9
2½ in.		"		7	9
3 in. Load bearing quality		"		8	9
4 in. do. do.		"		10	9
MOLER PARTITION BLOCKS					
2 in.	150 yds.	"		11	3
2½ in.	120 yds.	"		14	0
3 in.	100 yds.	"		15	0
4 in.	90 yds.	"		17	0
LIGHTWEIGHT CONCRETE BUILDING AND PARTITION BLOCKS OF VARIOUS SOURCES OF MANUFACTURE					
2 in.	100 yds.	per yd. sup.		5	4
2½ in.	80 yds.	"		6	5
3 in.	65 yds.	"		7	5
4 in.	50 yds.	"		9	4
4½ in.	44 yds.	"		10	2
6 in.	33 yds.	"		13	5
THERMALITE-YTONG PARTITION BLOCKS					
2½ in.	144 yds.	"		7	0
THERMALITE-YTONG LOAD-BEARING INSULATING BLOCKS					
3 in.	120 yds.	per yd. sup.		8	5
4 in.	90 yds.	"		11	0
5 in.	72 yds.	"		13	9
6 in.	60 yds.	"		16	6
8½ in.	42 yds.	"	1	3	8
FLOOR BLOCKS AND FILLER TILES					
Floor Blocks 12 in. × 12 in. delivered in full lorry-loads:					
3 in.		per 1,000	34	16	0
4 in.		"	37	8	0
5 in.		"	44	17	0
6 in.		"	51	4	0
7 in.		"	62	18	0
8 in.		"	73	11	0
9 in.		"	81	0	0
10 in.		"	89	15	0
Filler Tiles in multiples of 10 tiles per 1,000 multiples:					
12 in. × 3 in. × ⅞ in.		"	42	15	0
12 in. × 4 in. × ⅞ in.		"	73	15	0
10 in. × 5 in. × ⅞ in.		"	73	15	0

In house-raft construction



specify

BCL BLANKET DAMPCOURSE

BCL Blanket Dampcourse (0·005″ thick BCL polythene film) is the answer to the problems of moisture penetration into concrete house-rafts. It stops water rising through the raft into the house and, by preventing water-absorption by the concrete, removes the danger of the raft being damaged by frost or sulphate.

BCL Blanket Dampcourse is

—**waterproof**—virtually eliminates moisture-absorption by the concrete ;

—**rotproof and chemically inert**—will not break down or lose efficiency ;

—**tough and flexible**—will not easily break or tear when being laid ;

—**very easy to handle**—the film is light in weight and is simply laid over the fill before the concrete is placed ;

—**cheap**—material and labour-costs are very low.

Geo. Wimpey & Co. Ltd. make extensive use of BCL Blanket Dampcourse. This picture, taken with their kind permission, shows the film laid in position before the concrete is placed.

For further information, send today for a copy of the free illustrated booklet, "BCL Blanket Dampcourse", which incorporates a report on the tests carried out with this material by the Industrial Research Laboratories of the City of Birmingham Public Works Department.

BRITISH CELLOPHANE LIMITED* PLASTIC FILMS DIVISION

HENRIETTA HOUSE, 9 HENRIETTA PLACE, LONDON, W.1. MUSEUM 8311

*a member of the Courtaulds group of companies

To: BRITISH CELLOPHANE LIMITED, Plastic Films Division,
Henrietta House, 9 Henrietta Place, London, W.1.

Please send me, free of charge and without obligation, your booklet "BCL Blanket Dampcourse"..... Please tick as appropriate

Please ask your representative to call.....

NAME.....

ADDRESS.....

E21

FOR STRENGTH IN CONCRETE

•

KETTON CEMENT

•

SOLE DISTRIBUTORS

THOS. W. WARD LTD., ALBION WORKS, SHEFFIELD

K.23

STONEWARE DRAIN PIPES, etc.

The following are the percentages to be added to the Revised Standard List (Nov., 1956) prices delivered London Area.

Delivered ex Merchants Wharf or Depot.

	Over 2 tons	Over 100 pieces Under 2 tons	Under 100 pieces Under 2 tons
Best Quality ...	−10%	+5%	+12½%
BSS Best Quality...	+10% −10%	+10% +5%	+10% +12½%
Tested Quality ...	+37½% −10%	+37½% +5%	+37½% +12½%
BSS Tested Quality	+47½% −10%	+47½% +5%	+47½% +12½%

		£	s.	d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	12	4	0
4 in. do. do.	,,	16	7	0
6 in. do. do.	,,	33	13	0
9 in. do. do.	,,	63	12	0

DAMP COURSE

		£	s.	d.
Hessian base bitumen 7 lb. per yd. sup. in 24 ft. rolls cut to wall widths in lots of £6 value and over delivered London area	per yd. sup.		3	5
Asbestos base do. 7 lb. per yd. sup. do. do.	,,		5	2
Lead lined bitumen do. 9½ lb. per yd. sup. do. do.	,,		12	2
18 in. × 9 in. British damp course slates	per 1,000	43	8	11
14 in. × 9 in. do. do.	,,	32	8	2
9 in. × 9 in. do. do.	,,	18	18	9
18 in. × 4½ in. do. do.	,,	19	19	9
14 in. × 4½ in. do. do.	,,	15	18	3
9 in. × 4½ in. do. do.	,,	10	14	3

STONE

		£	s.	d.
Bath Stone				
Monks Park	per ft. cube		10	3
St. Aldhelm Box Ground	,,		11	6
Delivered in railway trucks at South Lambeth B.R. Western Region.				
Doulting Stone Random Blocks. Delivered London area	,,		10	10
Beer Stone. Delivered London area	,,		10	6
Portland Stone—				
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	,,		9	10
Yorkshire Stone—Blue Robin Hood Quality. Delivered to site London in 6-ton lots.				
9 in. × 3 in. Rubbed, weathered, throated and stolled cills	per ft. cube	4	5	10
12 in. × 6 in. do. do. do.	,,	3	1	2
12 in. × 3 in. Plain coping, twice throated	,,	2	7	6
12 in. × 3 in. Weathered and twice throated coping	,,	3	3	3
14 in. × 6 in. do. do. do.	,,	2	17	0
4½ in. × 9 in. Plinth rubbed on top and face ...	,,	2	11	0
3 in. sawn two sides Slabs, random sizes ...	per ft. sup.		9	1
Templates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...	per ft. cube	1	11	3
do. do. fair one edge for fair faced brickwork	,,	1	17	0
Hard York—				
12 in. × 2 in. Square Steps, rubbed on top and edge	per ft. run		11	0
14 in. × 3 in. Round-nosed Steps, rubbed on top and front	per ft. cube	2	18	3
12 in. × 6 in. Plain Steps, rubbed top and front	,,	2	11	0
2 in. Rubbed and Jointed Paving, given sizes ...	per ft. sup.		10	3
2 in. Sawn Paving, edges squared, in random sizes	per yd. sup.	3	12	0

TILES AND PANTILES

Delivered London area by road in 6 tons or over per 1,000.

	£	s.	d.
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	29	19	0
Hand-made Pantiles Berkshire district	55	18	0
Hand-made Double Roman Bridgwater district ...	64	4	1
Hand-made 10½ × 6½ tiles Berkshire district	15	18	3
Machine-made 10½ × 6½ Staffordshire district	15	2	6
Hand-made Hip and Valley tiles per doz.	1	11	10
Machine-made Hip and Valley tiles do.	1	10	1
Concrete tiles 10½ × 6½	8	10	0
do. Interlocking (49S)	19	16	6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate station. Per 1,000 actual.

	£	s.	d.
24 × 12	155	10	0
22 × 12	123	10	0
22 × 11	111	10	0
20 × 12	104	10	0
20 × 10	102	0	0
18 × 10	69	10	0
18 × 9	61	0	0
16 × 10	54	8	10
16 × 8	42	12	4

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

				£	s.	d.
Softwood						
Joinery quality		Ex Wharf	per standard	£115 to £140		
Carcassing quality		do.	,,	£94 — £98		
1 in. Tongued and Grooved Flooring		do.	,,	£110	0	0
Hardwood						
Mahogany—	African S.E.	do.	per ft. cube	1	10	0
do.	Honduras S.E.	do.	,,	3	5	0
Oak	European S.E.	do.	,,	2	10	0
do.	Japanese S.E.	do.	,,	3	0	0
do.	English Logs sawn ...	do.	,,	2	0	0
Teak	8 in. average S.E. ...	do.	,,	3	17	6
Walnut	African Logs sawn ...	do.	,,	1	2	6

DOORS (in Lots I–II

Delivered London area.

		£	s.	d.
1½ in. 4 Horizontal Panel. Pattern 4 in. deal				
2 ft. 0 in. × 6 ft. 6 in.	each	1	16	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	17	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	18	6
2 ft. 9 in. × 6 ft. 6 in.	,,	2	0	6
2 in. do. but top panel open. Pattern 4 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	9	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	11	6
2 in. 2 Panel top panel open. Pattern 2 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	3	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	5	0

SUNDRIES

		£	s.	d.
Delivered London area.				
1 in. Wood Wool Slabs 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (89 yds. to 1 ton)	per yd.		6	2
1½ in. do. (67 yds. to 1 ton)	,,		8	0
2 in. do. (52 yds. to 1 ton)	,,		9	9½
2½ in. do. (45 yds. to 1 ton)	,,		11	3
3 in. do. (39 yds. to 1 ton)	,,		12	7½
Quantities under 1 ton add 1d. per ½ in. of thickness.				
½ in. imported insulation Board, quantities over 5,000 sq. ft.	per 100 sq. ft.	2	2	6
¼ in. Hardboard do.	,,	1	17	6
9/16 in. do. do.	,,	2	4	6
3/16 in. Asbestos Flat Building Sheets	per yd. sup.		4	3½
¼ in. do. do. do.	,,		6	0
Roofing Felt 1-ply	,,		1	9
do. 2-ply	,,		2	2½
Best Scotch Glue in slabs	per ½ cwt.	5	8	0
do. pearl	,,	5	8	0
Croid Glue	28 lb.	2	6	0
Cut Nails 3 in. (1-ton lots)	per ton	78	10	0
do. 4 in. and up (1-ton lots)	,,	75	0	0
Wire Nails 3 in. (4-cwt. lots)	per cwt.	3	13	5
do. 4 in. and up (4-cwt. lots)	,,	3	12	10

METALS

STEEL JOISTS, ETC.

			£	s.	d.
Basis Joists— 6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in., 12 in. × 6 in., plain cut to lengths delivered London area		per ton	47	15	0
Extra for sizes					
3 in. × 1½ in.	4 in. × 1¾ in.	,,	3	10	0
3 in. × 3 in.	... ...	,,	2	10	0
4 in. × 3 in.	... ...	,,	2	5	0
10 in. × 4½ in.	... ...	,,	1	10	0
5 in. × 2½ in.	5 in. × 3 in.	,,	1	15	0
4¾ in. × 1¾ in.	... ...	,,	3	5	0
5 in. × 4½ in.	7 in. × 3½ in. 13 in. × 5 in. ...	,,		15	0
6 in. × 3 in.	24 in. × 7½ in.	,,	2	0	0
6 in. × 4½ in.	7 in. × 4 in. 8 in. × 4 in.	,,	1	5	0
9 in. × 4 in.	10 in. × 5 in.				
12 in. × 5 in.	22 in. × 7 in.	,,	1	0	0
9 in. × 7 in.	10 in. × 8 in. 12 in. × 8 in.				
14 in. × 5½ in.	14 in. × 6 in. 14 in. × 8 in.				
15 in. × 5 in.	15 in. × 6 in. 16 in. × 6 in.	,,		10	0
16 in. × 8 in.	18 in. × 6 in. 18 in. × 7 in.				
18 in. × 8 in.	20 in. × 6½ in. 20 in. × 7½ in.				
Steel angles average price		,,	48	15	0
Steel tees average price		,,	49	15	0
Fabricated work delivered London— R.S. Joists cut and fitted		,,	64	15	0
Compound girders		,,	69	5	0
Stanchions		,,	74	15	0
Compound stanchions		,,	79	5	0
In Roof Work—Trusses and Purlins		,,	89	10	0
Average prices not for awkward work.					
Angle cleats and ⅝ in., ¾ in. and ⅞ in. bolts average price London area		per cwt.	5	10	0

FERRO-CONCRETE BARS

		£	s.	d.
Mild Steel Ferro-Concrete bars British manufacture to BSS785 ex London Stock 1 in. diam., and upwards	per ton	49	10	0
¾ in. diam.	per ton extra	8	12	6
11/16 in. do.	,,	6	12	6
⅝ in. do.	,,	4	12	6
½ in. do.	,,	3	2	6
⅜ in. do.	,,	1	10	0
¼ in. and ⅜ in. diam.	,,		15	0

MILD STEEL TUBES

Tubes to BSS 1387—1957 and Fittings. *Revised* list prices and following discounts :

Galvanised Tube—	Under 1 ton	Over 1 ton	W.I. Fittings		Malleable Fittings
Light	−39½%	−41 %	Light	−26½%	Malleable List
Medium	−35½%	−37 %	Heavy	−22½%	−18½% + 40%
Heavy	−27½%	−29½%			
Black—					
Light	−50%	−51½%	Light	−32½%	Malleable List
Medium	−46%	−47½%	Heavy	−28½%	−18½%
Heavy	−38½%	−40%			

C.I. HALF-ROUND GUTTERS

Delivered London per yd. in 6 ft. lengths.

	Gutters	Nozzles	Stop Ends
3 in.	4/0½	3/7	1/–
3½ in.	4/4½	3/11	1/–
4 in.	5/8	4/5	1/7
4½ in.	6/3	4/11	1/10
5 in.	6/11½	5/4	2/2

METALS—*continued*

C.I.O.G. Gutters

Per yd. in 6-ft. lengths :	Gutters	Nozzle	Stop Ends
3 in.	5/2½	4/8	1/3
3½ in.	5/10	4/8	1/7
4 in.	6/5	4/11	1/10
4½ in.	6/11½	5/8	2/2
5 in.	7/7½	6/5	2/6

C.I. Rain-Water Pipes

	Pipe	Bends	Branches
2 in.	8/7½	4/5	6/4
2½ in.	8/7½	4/11	8/6
3 in.	9/8½	6/2	9/2
3½ in.	11/0½	7/3	11/–
4 in.	12/9	8/9	13/1

L.C.C. Coated Soil Pipe

2 in.	9/8½	7/7	9/2
2½ in.	10/4	8/5	11/5
3 in.	11/7	9/2	13/7
3½ in.	12/11½	11/5	15/10
4 in.	14/9	12/9	18/8

Above prices for gutters, rain-water and soil pipes for under 5-cwt. lots. only. Lots over 5 cwt. see List No. 3300, dated February 1, 1955, plus 25% and tonnage allowance. 4-ton lots 5%, 2-ton lots 2½%.

L.C.C. Coated Drain Pipes

In 9-fts.:	cwt. qt. lb.	Per yd.	Bends	Branches
4 in.	1 1 17	35/3	23/9	42/–
6 in.	2 0 1	51/7	63/9	101/–

Asbestos Rain-Water Pipes and Fittings

All less 17½% discount.

		2 in.	2½ in.	3 in.	4 in.
Pipes, 6-ft. lengths	per yd.	4/7	4/10½	5/11	7/10
Shoes	each	3/–	3/3	3/10	5/2
Single Branches	,,	4/8	5/6	6/7	9/2
Bends, square or obtuse	,,	3/3	3/7	4/8	6/7
Swan Necks, 4½ in. proj.	,,	3/7	4/8	5/2	7/3
do. 6 in do.	,,	3/10	5/2	5/10	7/10

Asbestos O.G. Gutters and Fittings

		4 in.	4½ in.	5 in.	6 in.
Gutters, 6-ft. lengths	per yd.	4/4	4/9½	5/9	6/10½
Drop ends	each	3/6	4/–	4/9	5/5
Stop ends	,,	1/1	1/2	1/3	1/5
Angles	,,	3/7	4/1	5/–	5/10
Nozzles	,,	3/6	4/–	4/9	5/–
Union Clips	,,	1/9	2/1	2/6	2/11

Asbestos Half-Round Gutters and Fittings

	per	3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters, 6-ft. lengths	yd.	3/0½	3/7½	3/8½	4/4½	6/1
Drop ends	each	2/6	3/–	3/3	3/7	5/2
Stop ends	,,	1/–	1/1	1/2	1/3	1/5
Angles	,,	2/10	3/3	3/7	3/10	5/2
Nozzles	,,	2/6	3/–	3/3	3/7	5/2
Union Clips	,,	1/3	1/4	1/5	1/7	2/5

	Per ton basis in London £ s. d.
Iron—Staffordshire Crown Merchant Quality	52 17 6
Mild Steel Bars	47 8 6
Mild Steel Hoops	49 0 0

	Ex Merchant's Stock per ton Two-ton lots £ s. d.
Soft Sheets C.R. and C.A.—	
20 gauge	62 7 6
24 gauge	64 17 6
26 gauge	67 17 6
Galvanised Corrugated Sheets, 6-ft. to 9-ft. —	
20 gauge	70 18 0
24 gauge	74 8 0
26 gauge	79 13 0
Galvanised Flat Sheets C.R. and C.A. :	
20 gauge	72 8 0
24 gauge	75 18 0
26 gauge	81 3 0

ALUMINIUM AND ALUMINIUM ALLOYS

(Base Prices)		£ s. d.
Sheet BS 1740 S1C 18 SWG (36 in. wide)	per lb.	3 0
Sheet BS 1470 NS3 Utility 18 SWG (36 in. wide)	,,	2 11
Coiled strip BS 1470 S1C 18 SWG (24 in. wide)	,,	2 11
Coiled strip BS 1470 NS3 Utility 18 SWG (24 in. wide)	,,	2 10½
Coiled strip for flashing, high purity, 22 SWG (12 in wide)	,,	3 1½
Corrugated sheet BS 1470 NS3 Circular Profile 8 ft. × 32 in. × 20 SWG	per sheet	1 13 6
Corrugated sheet BS 1470 NS3 Industrial... Profile 8 ft. × 31¾ in. × 20 SWG	,,	1 19 3
Corrugated sheet BS 1470 NS3 Mansard... Profile 8 ft. × 31¾ in. × 20 SWG	,,	1 12 7
Extruded section BS 1476 E1C simple moulding	per lb.	2 10
Extruded section BS 1476 E1C 1 in. diam. round	,,	2 7½
Extruded section BS 1476 HE10WP simple angle	,,	3 1½
Extruded section BS 1476 HE10WP 1 in. diam. round	,,	3 0½
Tubing BS 1471 T1C 1½ in. O/D × 20 SWG	,,	6 6½
Tubing BS 1471 HT19WP 1½ in. O/D × 20 SWG	,,	4 0½

PLUMBERS' BRASS WORK, etc.

Delivered in London area.

All per dozen	M.O.H. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron	87/–	128/–	—	—	—	—
Toilet bib cocks for iron	109/–	158/5	—	—	—	—
Screwdown stop cocks for iron	66/–	95/9	188/–	363/–	522/6	917/6
do. with two unions for lead	89/–	132/–	234/4	472/–	623/6	1,389/6
Double nut boiler screws	18/8	26/5	47/6	48/6	67/–	93/6
Heavy Croydon ball valves	77/–	193/6	312/5	568/8	734/10	—
Plumbers' union brass lead to iron	19/6	23/6	38/6	52/10	70/6	165/–
	1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4in.
Caps and Screws	33/–	40/8	59/6	92/5	118/10	155/3
Brass Sleeves	—	31/11	31/11	56/2	74/10	91/5

	1¼ × 6 lb.	1½ × 6 lb.	2 × 7 lb.	3 × 7 lb.
Lead P. trap with brass cleaning screws	68/6	85/6	137/–	233/9
Lead S. trap do. do.	82/9	102/9	168/3	302/3

Solder :			s. d.
Plumbers'	1 cwt. lots	320/–	14 lb. lots per lb. 3 7
Tinmen's	,, ,,	404/–	,, ,, ,, 4 5
Blow pipe	,, ,,	407/–	,, ,, ,, 4 6

Copper Tubes and Sheets

Copper tubes BSS 659/1944 on the basic price of 29d. per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 10 cwt.

	Extra d.		d.		d.
⅜ in. × 19 gauge	15½	Total per lb.	44½	Approx. per ft.	12
½ in. × 19 ,,	13¾	,, ,,	42¾	,, ,,	16½
1 in. × 18 ,,	12¼	,, ,,	41¼	,, ,,	25½
1¼ in. × 18 ,,	11⅜	,, ,,	40⅜	,, ,,	31
1½ in. × 18 ,,	11⅜	,, ,,	40⅜	,, ,,	37
2 in. × 17 ,,	13¼	,, ,,	42¼	,, ,,	59½

Small Quantity extras :—

10 cwts. to 5 cwts.	plus ½d. per lb.
5 cwts. to 2 cwts.	,, 1d. ,,
2 cwts. to 1 cwt.	,, 2d. ,,

	£ s. d.
Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras	280 0 0

Zinc

		£ s. d.
Sheet Zinc, 10 gauge (25 SWG), 5 cwt. lots upwards	per cwt.	7 15 3
,, ,, 12 gauge (23 SWG), ,, ,, ,,	,,	7 14 9
,, ,, 14 gauge (21 SWG), ,, ,, ,,	,,	7 13 6

Brass Tubes

Brass tubes, basic price, plus gauge and manufacturing extras	per lb.	2 0

LEAD SHEET AND PIPES

Basis selling price to one address in London or Home Counties :

		£ s. d.
Lead Sheet, English, 3½ lb. substance and upwards	per ton	109 0 0
,, Water Pipe, in coils	,,	111 5 0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. in dia.	,,	112 15 0
,, ,, ,, over 4 in. dia.	,,	114 15 0
,, Gas or Untinned Compo pipe	,,	112 15 0

5 cwt. lots and over less 6d. per cwt. off basic prices.

Extras over Basis for quantities under 5 cwt.:

3 cwt. and under 5 cwt.	per cwt.	4 0
1 cwt. do. 3 cwt.	,,	6 0

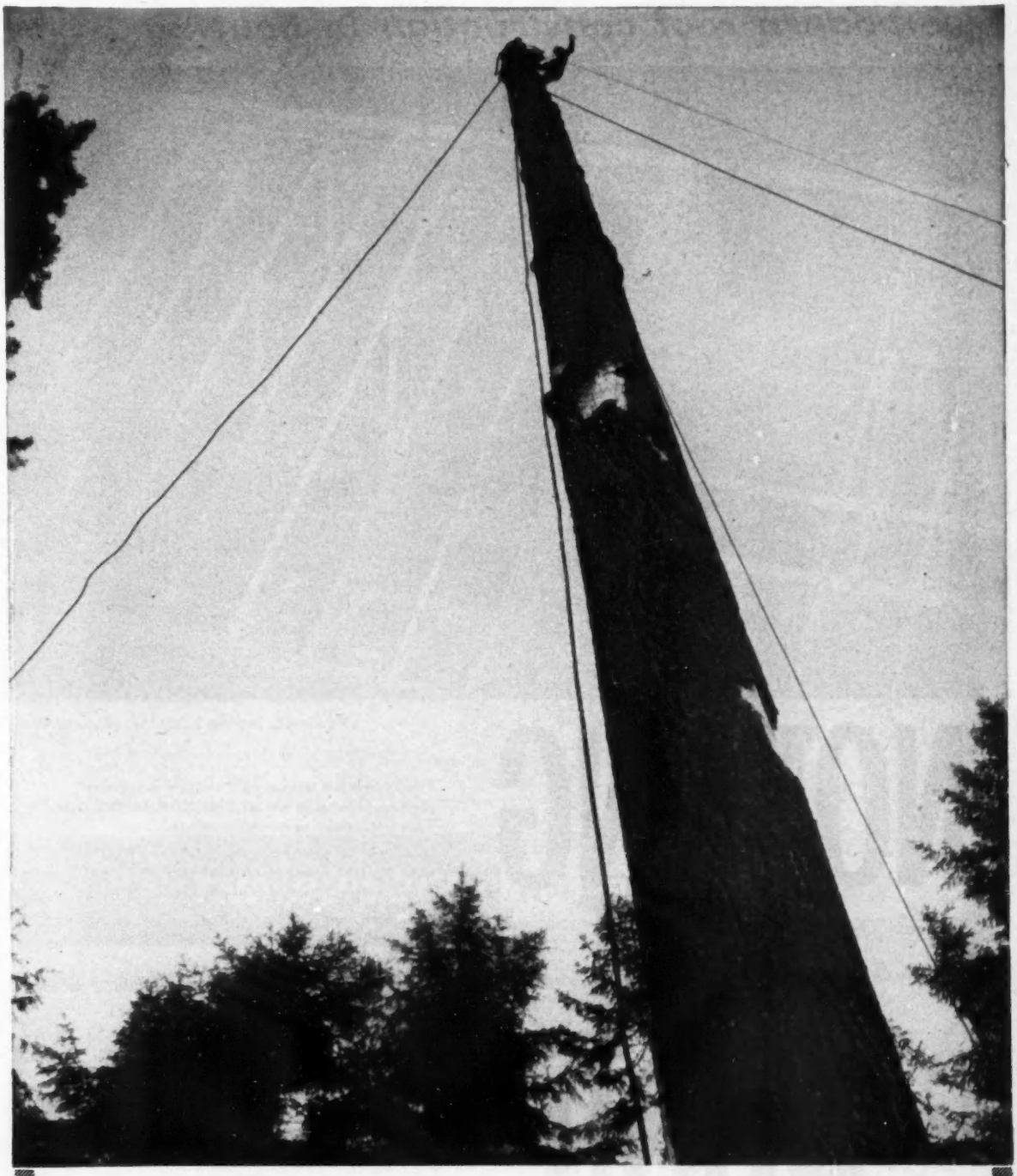
Smaller quantities than 1 cwt. priced specially.

Supplying sheet lead and lead pipe to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.

Allowance for Old Lead, collected, £63 0s. 0d. per ton weighed at buyer's works.

PLASTER, etc.

		£ s. d.
Coarse Pink in 1-ton loads and over delivered on site	per ton	8 4 6
do. White do. do. do.	,,	8 14 0
Sirapite Coarse BSS 1191 Class C do.	,,	8 15 9
do. Fine do. do. do.	,,	9 3 3
do. Browning BSS 1191 Class B do.	,,	8 15 9
do. Board Finish do. do.	,,	8 15 9
Blue Lias Lime, in 6-ton loads	,,	6 14 6
Hydrated Lime (Grey), in 6-ton loads	,,	5 10 0
do. (White) do.	,,	6 0 0
Lump Lime (Grey) do.	,,	5 7 0
do. (White) do.	,,	5 14 6
White Keen's or Parian Cement, in 1-ton loads	,,	11 19 3
Pink Keen's or Parian Cement, in 1-ton loads	,,	11 14 0
Granite Chips, in 6-ton loads	,,	2 5 3
Hair	per cwt.	4 17 6
Gypsum Plaster Lath or Base Board, ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	per yd.	2 3½
1,200 yds.	,,	2 2½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,	2 9
1,200 yds.	,,	2 9
Gypsum Plaster Wall Boards, 3 and 4 ft. wide 6 to 12 ft., ⅜ in. thick, 600 yds, and over in one delivery. Delivered site	,,	2 6½
1,200 yds.	,,	2 5½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,	3 0
1,200 yds.	,,	3 0



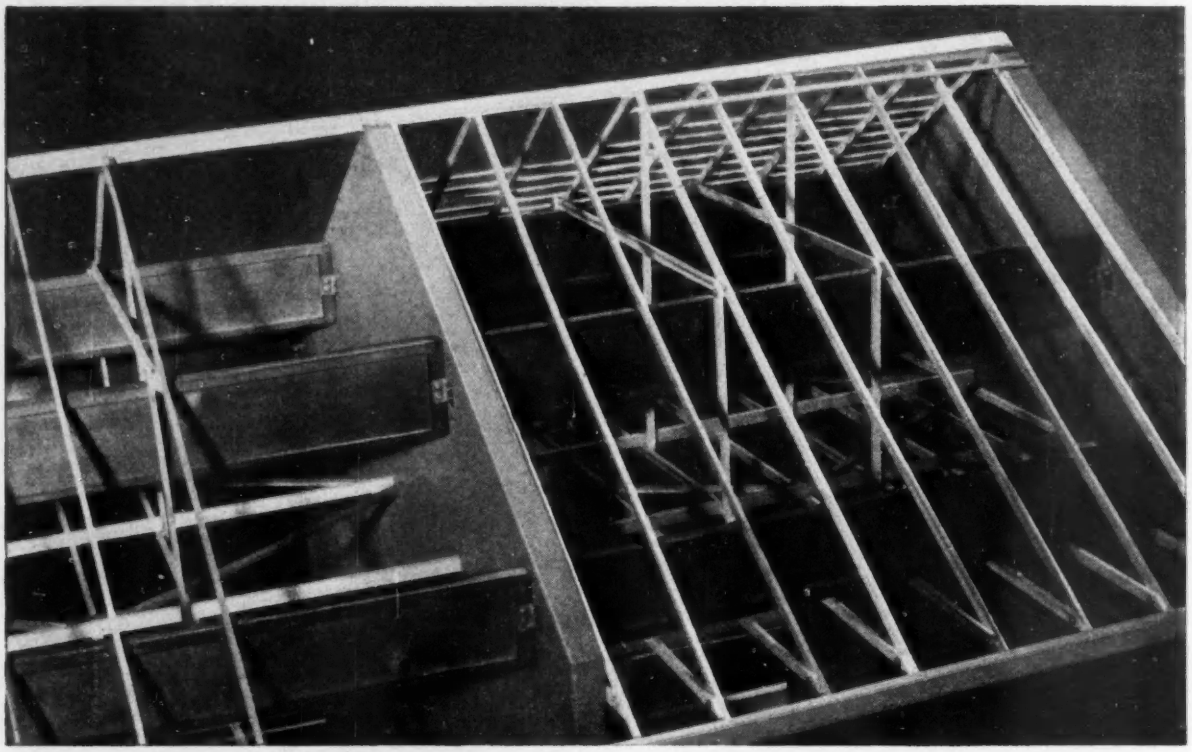
MELTON
MIDWOOD
MOWBRAY

Specialists in high class Standard Joinery

THE MIDLAND WOODWORKING CO LTD. MELTON MOWBRAY

AP/MW 23

For modern roof construction in housing



NOTHING BUT WOOD

has all these advantages

Today, timber 'cross-wall' roofing is rapidly gaining ground in modern housing construction. This important new system offers:

- Outstanding structural and economic advantages in semi-detached and terraced housing schemes, as well as for certain types of blocks of flats
- Big economies in cost—'front' and 'back' walls are non-load bearing and require no foundations or elaborate footings
- When lightweight, low-cost timber infilling panels or curtain walling are used, overall cost is further reduced
- Greater freedom in interior planning, as 'cross-walls' support roofs and floors

Special roof designs for cross-wall construction have been prepared by the TDA. A folder containing plans of these, and further information, will be sent on request.

For full details of timber cross-wall roofing or timber curtain walling

CONSULT TDA

ISSUED BY THE TIMBER DEVELOPMENT ASSOCIATION LIMITED · 21 COLLEGE HILL · LONDON EC4

and branches at Birmingham, Bristol, Glasgow, Leeds and Manchester

TGA TD165/1

PAINTS AND DISTEMPER

Delivered London area.		£	s.	d.
Ceiling Distemper	per cwt.	1	7	6
Washable Distemper	,,	5	15	0
Gloss Paint	per gal.	2	16	0
Super Snowcem cement paint (in 1 cwt. drums)	per cwt.	4	0	0
LEAD PRODUCTS AND OILS				
Ground White Lead, in 1 cwt. kegs	per cwt.	8	7	6
Genuine White Lead Paint, 1-19 gal. lots in 1 gal. tins	per gal.	3	6	6
Genuine Red Lead, Dry, 1 cwt. keg (10 ton lots)	per cwt.	5	12	6
do. do. do. (1 cwt. lots)	,,	6	19	0
Genuine Linseed Oil Putty, 1 cwt. keg	,,	2	13	6
Size XD quality 28 lb.	per tin		9	0
Raw Linseed Oil (5 gal.) drums extra	per gal.		19	2
Boiled Linseed Oil (5 gal.) do.	,,		20	0
SUNDRIES				
Turpentine substitute (5 gal.) drums extra	,,		5	4½
do. do. (40 gal.) do.	,,		4	8½
Solignum, Brown (5 gal. cans) Exterior	,,		8	8
Creosote (40 gal. barrels)	,,		2	3
Paste Powder (1 lb. packets)	per lb.		2	4
White Lining Paper	per piece		1	2

VARNISHES, etc.

Delivered London area.		£	s.	d.
Oak Varnish, Outside or Inside	per gal.	2	0	0
Oal Pale Copal do. do.	,,	2	0	0
Hard Drying Oak for Inside	,,	2	5	0
Crystal Paper Varnish do.	,,	2	8	0
Eggshell Flat Varnish do.	,,	2	2	0
Finest Carriage Varnish	,,	2	7	0
Front Door Varnish	,,	2	4	0
Japan Gold Size	,,	1	12	0
Black Japan	,,	1	16	0
Brunswick Black	,,	1	12	0
Berlin Black	,,	1	10	0
Terebene	,,	1	12	0
Knotting (1 gal. bottles free)	,,	1	15	0
French and Brush Polish (do.)	,,	1	15	0

GLASS

Delivered London area.		s.	d.
18 oz. Sheet Glass Ordinary Glazing Quality— Cut Sizes	per ft. sup.		9½
24 oz. do. do. do. do.	,,		11½
26 oz. do. do. do. do.	,,	1	2½
32 oz. do. do. do. do.	,,	1	6½
¼ in. Rolled Plate	,,	1	2½
7/16 in. Rolled and Rough Cast	,,	1	5
½ in. do. do.	,,	1	5¾
¼ in. Figured Rolled and Cathedral, Standard patterns—			
White Group 1	per ft. sup.	1	2½
do. Group 2	,,	1	8½
do. Standard Tints	,,	2	1½
do. Special Tints	,,	7	3
¼ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and Luminating Group 3	,,	1	7½
¼ in. Wired Cast	,,	1	9½
¼ in. Georgian Wired Cast	,,	1	9½
Hollow Glass Blocks—			
P.B.2 Cross reeded 5¾ × 5¾ × 3⅞ in.	each	3	6
P.B.3 Broad reeded 7¾ × 7¾ × 3⅞ in.	,,	5	4
P.B.32 Cross reeded 7¾ × 7¾ × 3⅞ in.	,,	5	4
P.B.4 Prismatic 7¾ × 7¾ × 3⅞ in.	,,	6	0
P.B.5 Flemish 7¾ × 7¾ × 3⅞ in.	,,	5	4
P.B.6 Boomerang 7¾ × 7¾ × 3⅞ in.	,,	6	0
Half Size Blocks—			
P.B.32 Cross reeded 7¾ × 3¾ × 3⅞ in.	,,	4	6
Radiused Corner Blocks to match up with—			
P.B.2 Cross reeded	,,	7	6
P.B.3 Broad reeded	,,	9	0
P.B.32 Cross reeded	,,	9	0
P.B.2, P.B.3, P.B.32 are also supplied in Light Diffusing Blocks at same price.			
¼ in. Polished Plate Glass, G.G. quality—			
In plates not exceeding 2 ft. sup.	per ft. sup.	4	7
,, ,, ,, 5 ft. sup.	,,	5	7
,, ,, ,, 45 ft. sup.	,,	6	9
,, ,, ,, 100 ft. sup.	,,	7	4
¼ in. Polished Plate, extra sizes, *i.e.*, plates exceeding 100 ft. sup. or 160 in. one way or 96 in. both ways. G.G. quality—Not exceeding 135 ft. sup. or 240 in. one way or 130 in. both ways	,,	10	9
Not exceeding 180 ft. sup. or do.	,,	14	3

Plates exceeding 180 ft. sup. prices on application.
Substances other than ¼ in. Polished Plate at Special Prices.
Quantity Tariff—Sheet and Sundry Glass.

The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass	Minimum quantity	per ft. sup. s.	d.
18 oz. sheet O.Q.	3,000		6½
24 oz. ,, ,,	2,000		8½
26 oz. ,, ,,	2,000		11
32 oz. ,, ,,	2,000	1	2½
¼ in. Rolled Plate	1,000		10½
¼ in. Figured Rolled and Cathedral Standard Patterns, White Group 1	1,000		10½
do. Group 2	1,000	1	2
¼ in. Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte Group 3	1,000	1	2
7/16 in. Rolled Plate or Rough Cast	2,000	1	1
½ in. do. do.	2,000	1	1½
¼ in. Wired Cast, Hexagonal	2,000	1	4½
¼ in. Georgian Wired Cast	2,000	1	4½

THE BUILDER RATES OF WAGES

AS FROM APRIL 18, 1960. **(Every endeavour is made to ensure accuracy but we cannot be responsible for errors.)**

KEY TO SCHEDULE OF GRADE RATES.

Grade Classification	A	A1
Craftsmen	4/11½	4/11
Labourers	4/4	4/3½

Town	*Grade*
Aberavon	A
Aberdare	A
Abergavenny	A
Abingdon	A1
Accrington	A
Addlestone	A
Afan Valley	A
Aldeburgh	A1
Aldershot District	A1
Alfreton UD	A
Alnwick UD	A
Altrincham	A
Amble	A
Ambleside	A
Amersham	A
Ammanford	A
Andover	A1
Anglesey, Isle of	A
Ardingly	A1
Arundel	A1
Ascot	A1
Ashbourne RD	A1
Ashbourne UD	A1
Ashby-de-la-Zouch UD	A
Ashby Woulds UD	A
Ashford (Kent)	A1
Ashford (Middlesex)	A
Ashington UD	A
Ashtead	A
Ashton-under-Lyne	A
Aspatria and Brayton	A
Atherstone RD	A
Attleborough	A1
Axminster	A1
Aylesbury	A1
Aylsham	A1
Bagshot	A1
Bakewell UD	A1
Banbury	A1
Bangor	A
Barnard Castle UD	A
Barnoldswick UD	A
Barnsley CB	A
Barnstaple	A1
Barrow-in-Furness	A
Barrow-upon-Soar RD (part Thrussington)	A1
Barry	A
Basford RD (ex. Willough-by-on-the-Wolds A1)	A
Basingstoke	A1
Bath	A
Batley MB	A
Baxterley	A1
Beaconsfield District	A
Bearl	A
Beccles	A1
Bedale RD	A
Bedford	A
Bedlington	A
Bedlingtonshire UD	A
Bedwas	A
Beeston & Stapleford UD	A
Belper UD	A
Belton	A
Berkhamsted	A
Berrington	A
Berwick Borough	A
Beverley MB	A
Bewdley MB	A
Bexhill-on-Sea	A1
Bideford	A1
Biggleswade	A1
Billericay	A
Billing	A
Billingham UD	A
Bilsthorpe	A
Bilston MB	A
Birchington	A1
Birkenhead	*
Birmingham CB	†A
Bishop Auckland UD	A
Bishop's Stortford	A
Bishops Castle MB	A1
Bispham	A
Blackburn	A
Blackpool	A
Blackwell RD	A
Blandford	A1
Blaydon UD	A
Blidworth	A
Blyth B.	A
Bodmin	A1
Bognor Regis	A1
Boldon UD	A
Bolsover UD	A
Bolton	A
Boston MB	A
Bourne End	A
Bournemouth District	A
Brackley MB	A1
Bracknell	A1
Bradford CB	A
Bradford-on-Avon	A1
Braintree	A1
Brandon & Byshottles UD	A
Brecon, Borough of	A1
Breconshire, County of	‡A1
Brent Knoll	A1
Brentwood	A
Bridgend	A
Bridlington MB	A
Bridlington RD	A
Bridgnorth MB	A
Bridgnorth RD	A1
Bridgwater	A1
Brierfield	A
Brighouse MB	A
Brighton & Hove	A
Bristol District	A
Broadstairs	A1
Bromsgrove UD	A
Broughton, Flint	A
Buckfastleigh	A1
Buckingham	A1
Buckley	A
Bungay	A1
Burnham-on-Crouch	A1
Burnham-on-Sea	A1
Burnley	A
Burton-on-Trent CB	A
Bury	A
Bury St. Edmunds	A1
Buxton	A
Byfleet	A1
Caernarvon	A
Caernarvonshire, Cnty. of	‡A
Cal(c)er Valley	A
Camberley District	A1
Cambridge	A
Cannock UD	A
Canterbury	A1
Cardiff	A
Cardiganshire, Cnty. of	‡A1
Carlisle	A

CURRENT RATES OF WAGES—Continued

Town	Grade
Carlton UD	A
Carmarthen—Borough of	A
Carmarthenshire, Cnty. of	A
Carnforth	A
Castleford UD	A
Caterham	A
Chapel-en-le-Frith	A
Chard	A1
Charmy Down	A
Chatham District	A
Chatteris	A1
Cheadle (Staffs) RD	A
Chelmsford	A
Cheltenham	A
Chepstow	A
Chertsey	A
Chester	A
Chester-le-Street UD	A
Chesterfield MB	A
Chesterfield RD	A
Chichester	A1
Chipping Norton	A1
Chipping Sodbury	A1
Chippenham (inc. Chippenham Within and Hardenhuish)	A1
Chorley	A
Cirencester	A1
Clacton	A1
Clay Cross UD	A
Cleethorpes MB	A
Clevedon	A1
Cleveleys	A
Clitheroe	A
Coalville UD	A
Cobham (Surrey)	A
Colchester	A
Colne	A
Colwyn Bay	A
Congleton	A
Consett UD	A
Conway	A
Corby UD	A
Cornwall, County of	‡A1
Corsham District	A
Coventry CB	A
Cranbrook	A1
Cranleigh	A1
Cranwell Aerodrome Site	A
Crawley	A
Crewe	A
Crewkerne	A1
Cromer	A1
Crook and Willington UD	A
Crowborough	A1
Cuckfield	A1
Cwmbran	A
Dalton-in-Furness	A
Darlington CB	A
Dartmouth	A1
Darwen	A
Daventry MB	A
Deal	A1
Denbigh Town	A
Derby CB	A
Devizes	A1
Devon, County of	‡A1
Dewsbury CB	A
Didcot	A1
Diss	A1
Doncaster CB	A
Dorchester	A1
Dorking	A
Dorset, County of	A1
Dover	A1
Dovercourt	A
Driffield UD	A1
Drigg & Carleton	A
Droitwich MB	A
Dudley CB	A
Dunstable	A
Durham B	A
Eastbourne	A
E. Glam. & Mon. Val.	A
East Grinstead District	A1
East Kesteven RD	A1
East Retford MB	A
Eastwood (Notts) UD	A
Ebbw Vale & District	A
Edenbridge	A1
Ely	A1
Epping	A
Evesham MB	A1
Exeter	A
Exmouth	A1
Fakenham	A1
Falmouth	A1
Fareham	A
Faversham	A1
Felixstowe	A1
Filey UD	A
Fleetwood	A
Flint MB	A
Folkestone	A1
Frinton	A1
Frome	A1
Gainsborough UD	A
Gateshead CB	A
Gillingham (Dorset)	A1
Gillingham (Kent)	A
Glastonbury & Street	A1
Glossop	A
Gloucester	A
Gloucestershire, Cnty. of	‡A1
Godalming	A1
Goole, MB	A
Goole RD	A
Gosport	A
Grantham MB	A
Gravesend	A
Great Yarmouth	A
Grimsby CB	A
Grimsby RD (part)	A1
Guildford District	A1
Halesowen MB	A
Halifax CB	A
Halstead	A1
Haresfield	A1
Harlow	A
Harpenden	A
Harrogate MB	A
Hartlepool B	A
Harwell	A1
Harwich	A
Haslemere	A1
Hastings	A1
Hatfield (Herts)	A
Havant	A
Haywards Heath	A1
Heanor UD	A
Hemel Hempstead	A
Henley-on-Thames	A1
Hereford	A1
Herefordshire, Cnty. of	‡A1
Herne Bay	A1
Hertford	A
Hexham RD	A
Hexham UD	A
Heysham	A
Heywood	A
Higham Ferrers MB	A
High Wycombe	A
Hinckley UD	A
Hitchin	A
Hoddesdon	A
Holywell	A
Horley	A1
Horncastle UD	A1
Horsham	A1
Horwich	A
Huddersfield CB	A
Hull	A
Hunstanton	A1
Huntington (Staffs)	A
Ilfracombe	A1
Ilkeston MB	A
Ilkley UD	A
Ipswich	A
Isle of Sheppey	A1
Isle of Thanet	A1
Isle of Wight	A1
Jarrow B	A
Keighley MB	A
Kendal	A
Kenilworth UD	A
Kettering MB	A
Keynsham	A
Kidderminster MB	A
Kingskerswell	A1
King's Lynn	A1
Kingsteignton	A1
Kirkham	A
Knaresborough UD	A
Knutsford	A
Lancaster	A
Leamington MB	A
Leatherhead	A
Leeds CB	A
Leek UD	A
Leicester CB	A
Leighton Buzzard	A1
Leiston	A1
Leominster	A1
Letchworth	A
Lewes	A1
Lichfield MB	A
Lincoln CB	A
Liskeard	A1
Littlehampton	A1
Liverpool	*
Llandudno	A
Llanelly (inc. Llanelly RD)	A
Llanfairechan	A
Llangollen	A
London	*
Long Eaton	A
Looe	A1
Loughborough MB	A
Louth MB	A1
Lowestoft	A
Loxton	A1
Ludlow MB	A1
Ludlow RD	A1
Luton	A
Lyme Regis	A1
Lyneham (Devon)	A1
Lytham	A
Macclesfield	A
Maidenhead	A
Maidstone	A
Maldon (Essex)	A1
Maltby UD	A
Malton UD	A1
Malvern UD	A
Manchester	A
Manningtree	A1
Mansfield MB	A
March	A1
Margate	A1
Market Harborough RD	A1
Market Harborough UD	A
Market Rasen UD	A1
Martock	A1
Maryport	A
Matlock UD	A
Melksham	A1
Melton Mowbray UD	A
Merionethshire	A
Merthyr	A
Mexborough UD	A
Middlesbrough CB	A
Middleton	A
Middlewich	A
Mildenhall	A1
Milford Haven UD	A1
Minehead	A1
Monmouth—Borough of	A
Monmouthshire	A
Morecambe	A
Moreton Valence	A1
Morley	A
Morpeth B	A
Morpeth RD	A
Mundesley	A1
Nantwich	A
Neath & Valley	A
Nelson	A
Newark MB	A
Newbury	A1
Newcastle-upon-Tyne CB	A
Newcastle-under-Lyme	A
New Forest District	A1
Newmarket	A1
Newport, Mon.	A
Newport Pagnell	A1
Newquay	A1
Newton Abbott	A1
Normanton UD	A
Northallerton District	A
Northallerton UD	A
Northampton CB	A
North Shields	A
North Walsham	A1
Northwich	A
Norton Radstock	A1
Norwich	A
Nottingham CB	A
Nuneaton MB	A
Oakham RD	A1
Oakham UD	A1
Okehampton	A1
Oldham	A
Ongar	A
Ormskirk	A
Ossett & Horbury	A
Oswestry	A
Oundle UD	A1
Oxford	A
Oxted	A1
Padstow	A1
Paignton	A1
Par	A1
Pembrokeshire	A
Penmaenmawr	A
Penrith UD	A
Penzance	A1
Peterborough, Soke of (Eastern Regional portion)	A1
Petersfield	A1
Pickering	A
Plymouth	A
Pontefract MB	A
Pontypool & District	A
Pontypridd District	A
Porthcawl	A
Portishead	A
Portland Bill	A1
Portsmouth	A
Port Talbot	A
Preston	A
Princetown	A1
Pudsey MB	A
Pulborough	A1
Radnorshire, County of	‡A1
Ramsgate	A1
Raunds UD	A
Rayleigh	A
Reading	A
Redcar B	A
Redditch UD	A
Redhill & Reigate	A
Rhondda Valley	A
Richmond B (Yorks.)	A
Ripon MB	A
Rochdale	A
Rochester	A
Ross-on-Wye	A1
Rossendale Valley	A
Rotherham CB	A
Royston	A1
Rugby MB	A
Rugeley UD	A1
Rushden UD	A
Saffron Walden	A1
St. Albans	A
St. Austell	A1
St. Helens	A
St. Neots	A1
Salisbury City	A1
Salisbury Plain	A1
Sandy	A1
Sawbridgeworth	A
Saxmundham	A1
Scarborough MB	A
Scunthorpe MB	A
Seaford & Newhaven	A1
Selby UD	A
Sevenoaks	A
Shaftesbury	A1
Sheerness	A1
Sheffield MB	A
Shepton Mallet	A1
Sherborne	A1
Shipley	A
Shoeburyness	A
Shoreham	A
Shrewsbury MB	A
Sirhowy Valleys	A
Sittingbourne	A1
Skegness UD	A1
Skipton UD	A
Sleaford UD	A
Slough, Windsor & Eton District	A
Smethwick CB	†A
Smettisham	A1
Solihull B	A
Somerset, County of	‡A1
Southampton & Eastleigh	A
Southend-on-Sea District	A
Southport	A
South Shields CB	A
Southwold	A1
Spalding UD	A1
Stafford MB	A
Staines	A
Stamford MB	A
Stantonwick	A
Stevenage	A
Stockport	A
Stockton RD	A
Stockton-on-Tees B	A
Stoke-on-Trent CB	A
Stoke Orchard	A1
Stourbridge MB	A
Stouport UD	A
Stowmarket	A1
Stratford-on-Avon MB	A
Stroud (RD Area)	A1
Sunderland CB	A
Sunningdale	A1
Sutton Coldfield MB	A
Swadlincote UD	A
Swaffham	A1
Swanage District	A1
Swansea	A
Swindon District	A
Swinton UD	A
Tamworth MB	A
Taunton	A1
Tavistock	A1
Tenterden	A1
Teignmouth	A1
Tewkesbury	A1
Thames Haven	A
Thetford	A1
Thirsk RD	A
Thorpe Bay	A
Thurrock UDC (including Tilbury, Grays and the area north to Billericay)	A
Todmorden MB	A
Tonbridge	A1
Torquay	A1
Totnes	A1
Tring	A1
Trowbridge	A1
Truro	A1
Tunbridge Wells	A1
Tynemouth CB	A
Ulverston	A
Uppington (Salop)	A1
Uttoxeter RD	A1
Uttoxeter UD	A1
Wakefield CB	A
Wakefield RD	A
Walsall CB	A
Wallsend B	A
Walsden	A
Walton-on-Naze	A1
Ware	A
Warminster	A1
Warrington	A
Warwick MB	A
Wednesbury MB	A
Wellingborough UD	A
Wellington UD	A
Wellington (Somerset)	A1
Wells (Norfolk)	A1
Wells (Somerset)	A1
Welwyn	A
Welwyn Garden City	A
West Bromwich CB	A
Westbury	A1
Westcliff-on-Sea	A
Westerham	A1
West Hartlepool CB	A
Westmorland	A
Weston-super-Mare	A1
Weybridge	A
Weymouth (incl. Portland Bill, excl. Portland Stoneyards)	A1
Whitby UD	A1
Whitby RD	A1
Whitehaven	A
Whitley & Monkseaton UD	A
Whitstable & District	A1
Wickford	A
Widnes	A
Wigan	A
Wigton	A
Wilmslow	A
Wiltshire, County of	‡A1
Wimborne	A1
Wincanton	A1
Winchester	A1
Windermere	A
Wisbech	A1
Witham	A1
Withernsea UD	A
Woking	A1
Wokingham	A1
Wolverhampton CB	A
Wolverton District	A1
Woodbridge	A1
Woodhall Spa UD	A1
Woodstock	A1
Worcester CB	A
Workington	A
Worksop MB	A
Worthing	A1
Wrexham (incl. Cefn)	A
Wroughton	A1
Wylam	A
Wymondham	A1
Yate	A1
Yeovil Borough	A1
York CB	A
Ystalyfera	A

* For Birkenhead, Liverpool and London the rates are :—Craftsmen, 5s. 1d. ; Labourers, 4s. 5½d. In the case of London the rate beyond the 12-mile radius is : Craftsmen, 5s. 0½d. ; Labourers, 4s. 5d. † Plus 4d. per working day. ‡ This is the County rate and applies except where higher grades are stated.

NOTE.—Carpenters and Joiners providing own tools when employed in establishments operating under the Supplementary Rules for Woodworking Factories and Shops receive 2d. per day ; when employed on other building industry work, 4d. per day.

WOMEN'S RATES.—In all districts throughout the country the rate of wages for women engaged in craft processes is 4s. 1d. per hour. Women engaged on work other than craft processes, 3s. 9d. per hour.

For Building Trade Wages in Scotland, see page 304

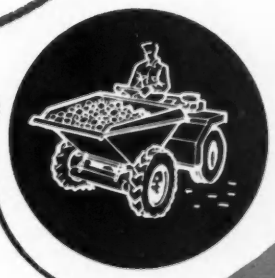
GREENHAM

PLANT HIRE

LIMITED

BETTER PLANT
BETTER SERVICE
BETTER RING . . .

ISLEWORTH 1141 LONDON
TOTTENHAM 6803 LONDON
ALDRIDGE 52861 BIRMINGHAM
ATHERTON 1114 MANCHESTER
CENTRAL 3428 LIVERPOOL
AIRDRIE 2070 SCOTLAND
ASHTON-UNDER-LYNE 4312



THE GREENHAM GROUP

A COMPLETE SERVICE FOR BUILDERS AND CONTRACTORS

GREENHAM PLANT HIRE LTD. LONDON · BIRMINGHAM · MANCHESTER · LIVERPOOL
ASHTON-UNDER-LYNE · AIRDRIE, SCOTLAND

GREENHAM EQUIPMENTS LTD. LONDON · *VIKing 3651*

GREENHAM TOOL CO. LTD. LONDON · *ISL 4422* · BIRMINGHAM *Aldridge 52881*

GREENHAM SAND & BALLAST CO. LTD. LONDON · *FEL 2285*

GREENHAM TYRE CO. LTD. LONDON · *HOU 7231*

GREENHAM (EAST AFRICA) LTD. P.O. Box 3363 Nairobi, Kenya, B.E.A.

GREENHAM READY MIXED CONCRETE LTD. LONDON · *RENown 6592*

THE GREENHAM GROUP
FOR GOOD SERVICE

The architect and contractor listen to the specialist's proposals

BISON floors, beams and concrete frame structures

SPEED & STRENGTH

CONCRETE LIMITED are the largest structural precast concrete specialists in the world

CONCRETE (SOUTHERN) LIMITED Green Lane, Hounslow, Middlesex *Hounslow 2323* London Sales Office: 16 Northumberland Avenue, W.C.2 *Whitehall 5504*
CONCRETE (MIDLANDS) LIMITED Dovehouse Fields, Lichfield, Staffs. *Lichfield 3555* Birmingham Sales Office: Winchester House, 5 Victoria Square, Birmingham, 2 *Midland 0331*
CONCRETE (NORTHERN) LIMITED Stourton, Leeds 10 *Leeds 73211* Manchester Sales Office: 40 King Street West, Manchester 3 *Blackfriars 5676*
CONCRETE (SCOTLAND) LIMITED Etna Road, Falkirk *Falkirk 2366* Glasgow Sales Office: Elmbank Street, Glasgow C.2 *City 3292*

60/5

TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 134 of this issue. The form can be used for more than one inquiry.

1. Packaging

Metallisation is the technique of depositing a thin layer of aluminium or other metal on the surface of a material, such as film or paper, under critical conditions of vacuum. Following a number of years' research and development, a comprehensive range of METALLISED MATERIALS is now being produced which because of its protective quality and decorative appeal, is likely to find immediate uses in packaging and display work. Ultimately, however, it is thought that the materials will have a wider field: heating elements for blankets and undercarpet heating, cable conductors, and thermal insulation of roofs and walls are some of the suggested applications.

Meanwhile research work is continuing on producing metallised papers where there are still some problems to overcome.

E. S. & A. Robinson Ltd., Redcliffe-st., Bristol.

2. Parking

A method for increasing garage space, which originated in Sweden, is now being operated in this country. Briefly, it utilises the wide driving lanes that most conventional garages have, to accommodate GARAGE PLATES. These plates, which are designed for one, two or four cars are mounted on a low rail and can be moved longitudinally to the driving lane so as to leave an opening in front of the parking space where entry or exit is required. The opening is large enough to allow cars to manœuvre. It is estimated that where double plates are used, which can accommodate four cars, parking space can be increased by as much as 36 per cent.

Extraspace Parking Plates, 11 Buckingham-st., London, WC2

3. Panelling

A neat use of DECORATED PLYWOOD, which was recently brought over here from Scandinavia, is illustrated in the interior decor of the new Rosebery stand at Epsom racecourse. The plywood was used to face all the buffet bars (one was 150 ft. in length) and the 'Tote' offices throughout the stand. The type of material used was Plyfa Profil Type O, a mahogany-obechi plywood decorated with vertical stripes. It is easy to work and the joints are virtually invisible. For finishing and subsequent maintenance, it is only necessary to either polish or varnish.

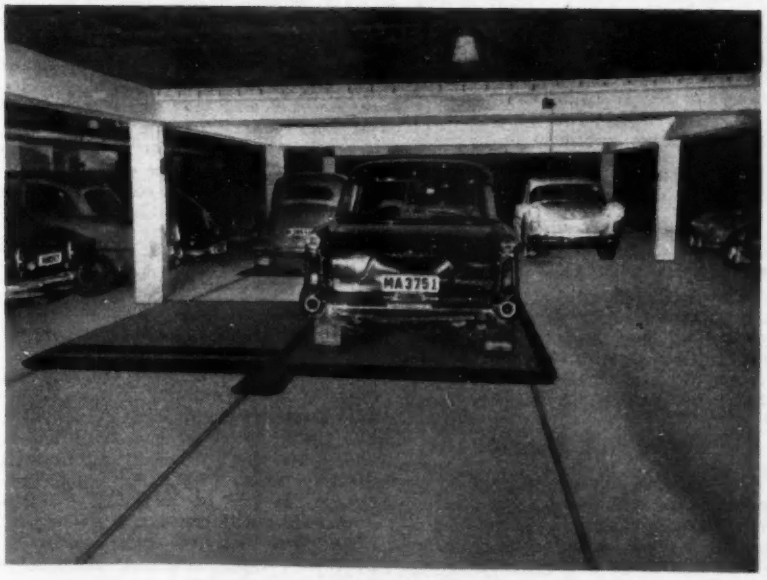
Venesta Plywood Ltd., Vintry House, Queen-st. Place, EC4.

4. Engines

An unusual degree of precision has been used in the mass production of a range of air-cooled PETROL ENGINES now being introduced into this country from Italy. This has enabled the manufacturer to develop 28 different types from 6 basic models, 16 in the four-stroke range and the remainder, two-stroke. Many of the engines can be supplied with vertical or horizontal crankshafts and, where required, with special ball-bearing crankshaft support.

The main features of the individual engines seem to be lightness in weight, compactness and strength. Where maximum wear takes place, such as at the cylinder liners, valve seats and guides, special cast-iron inserts are integrally cast with the aluminium alloy. The liner is sufficiently thick to allow for two re-bores and oversize pistons and rings are standard spare parts. Valve guides can be reamed and valve seats re-ground. Good cooling is provided by the combination of a flywheel fan and deeply finned aluminium blocks. And the diaphragm-type carburettor allows the engine, in the case of the two-stroke, to operate in any position, even upside down. The angle at which the four-stroke engine will work would be limited by the level of the oil in the crankcase.

Mackay Industrial Equipment, Ltd., Faggs-rd., Feltham, Middlesex.



By making use of the driving lane, these movable plates give increased parking space. They can be moved either forward or backward by an automatic pulling device

5. Fixing Aids

A new type of WALL-PLUG is coming on to the market which uses the principle of the expanding shell to obtain a secure locking position. A hole is first drilled in the wall to the depth of the screw, and the shell and a tapered brass collett inserted. The screw is then passed through the article to be fixed and screwed into the collett. As it is tightened, the tapered collett exerts a powerful thrust against the expandable shell to make a tight fitting. The advantage here is that the point at which the thrust is greatest, where the shell expands, is well inside the wall away from the friable plaster.

The plugs can be used for fixing shelves, cupboards, brackets and all types of wall fitments to most kinds of wall surfaces.

Grippo Products, Ltd., Henshaw Works, Oldham, Lancs.

6. Heating

A new range of domestic OIL-FIRED BOILERS fitted with pressure jet burners is now available in this country. They can be used down to outputs of less than half their maximum continuous rating and still maintain a high efficiency and a low smoke number. The thermal efficiency is well in excess of 80 per cent. An interesting feature of the boiler is the optional mixing valve, designed as an integral part, for either manual or automatic operation. It ensures a constant supply of hot water whilst also meeting the demand from the radiator circuit.

McConnell's (London) Ltd., St. Stephen's House, Westminster, SW1.

Technical Publications

As a supplement to their main sliding door gear catalogue, COBURN ENGINEERS LTD., of Peasmarsh, Guildford, Surrey, have published a guide to overhead runways. This booklet illustrates gear available for runways. Some typical applications are depicted, including installations in a factory, chemical works, abattoir, brewery and on a poultry farm.

London County Council

Town Expansion Schemes ; Building in Bryanston-square

IN THE FIRST SIX MONTHS of 1960, 13 firms from London and Greater London commenced production in the expanding country towns beyond the Green Belt, bringing the total to 35. Another 18 hope to start by the end of the year. 41 more firms are in negotiation with the LCC's Industrial Centre, and many of these should be starting in 1961. The Industrial Centre is welcoming an increasing number of inquiries.

Expansion is in full swing at Aylesbury and Bletchley in Buckinghamshire, Swindon (Wilts.), in the East Anglian towns of Haverhill and Thetford and at Edenbridge (Kent). At Luton (Beds.) and Letchworth (Herts.) local industry is expanding with the help of workers from London, and it is hoped that operations will soon be starting at Ashford (Kent), Basingstoke (Hants.) and Bury St. Edmunds (West Suffolk).

The faster firms move out from London, the faster will new homes be built in the expanding towns for the employees and their families. So far, 3,389 families (3,308 of them from the County of London) have been placed in employment there through the LCC's Industrial Selection Scheme; and 2,462 of these have already been accommodated. A further 2,707 families (including 493 from the County of London) have secured employment and accommodation in the expanding towns other than through the Industrial Selection Scheme: e.g., families of employees who move with their firms and others with special skills.

The present target for all 12 town expansion schemes is to provide homes and jobs for 28,500 London families. Further schemes are on the way.

Bryanston-square Development

SIR LOUIS GLUCKSTEIN asked the chairman of the Town Planning Committee if an application had been received for the erection of a nursing home at 10, 11 and 12 Bryanston-square, and did he recall the difficulties which arose in connection with a previous application for the erection of a building in Bryanston-square, and would he ensure that when the present application was considered by the Town Planning Committee the importance of having regard to the special character of the square would be fully borne in mind?

MR. R. EDMONDS, replying on July 19, said that the answer to all the points in the question was 'Yes.'

Inquiry Bureau

Rebuilding a Domestic Flue

QUESTION: The lining of one of the chimneys (30 years old) is getting loose and small fragments keep falling down into the bedroom grate. In addition I notice a blackening of the outside of the chimney pot which is no doubt connected with the trouble. The point is, can one leave it alone and ultimately dispense with a lining to the chimney? Also is it an expensive job having a chimney relined?

J. P.

ANSWER: It is evident that the parging or lining to this flue is not of a very good quality mortar and I would suggest it has little or no cement content, probably just a lime and sand mortar. The loss of this lining would not necessarily make much difference to the burning of the fire provided the brickwork construction of the flue was sound.

The parging to a flue has two objects: First, to form a smooth passage for the gases and/or smoke to be drawn upwards by the draught, and second, as a fire precaution, to prevent any sparks or flame from penetrating through a weak joint in the brickwork and causing a fire within the house. This has a particular significance should the chimney catch fire through neglecting to sweep it regularly.

The re-lining of this flue would be quite expensive. If it was on an outside wall the cost would probably be in the region of £30 depending on the height. It is assumed that this flue is on the upper floor of a two-storey house. If it was on a party wall it would mean working from inside the house, cutting holes into the flue as well as on the roof, which may cost more, and also it would mean redecoration of the room. The lining could be done with asbestos cement flue pipes.

R. M. E.

Management in the Building Industry

Director-Level Conference Organised by BAS

A DIRECTOR-LEVEL only management conference for the heads of building firms has been arranged by the Building Advisory Service, on behalf of the National Federation of Building Trades Employers, to take place at the Waldorf Hotel, London, on October 11 and 12 next.

The subjects to be dealt with will include the functions of management, human relations, work study, planning, training and development of executives, incentives, management accounting and communications.

Applications for places on the course should be addressed to the Building Advisory Service, 82 New Cavendish-street, London, W1. The fee for each delegate will be 7 gns., to include lunch and light refreshments on each day. The number of places on the course is strictly limited and early application is advisable.

Work Study Training

The Building Advisory Service is also running a six-week course for the training of work study officers in the building industry. It commences on August 29, and will be held at 82 New Cavendish-street, W1. There are now three vacancies remaining to be filled and applications for these are invited. The fee is 100 gns.

Journey Records for Builders' Transport

From a Transport Correspondent

A SIMPLIFIED form of journey record, suitable for most builders' transport and other private goods vehicles engaged mainly on local work, is being considered by the Minister of Transport.

The existing type of daily log sheet, which was introduced by the 1933 Road and Rail Traffic Act, has often been criticised as serving no useful purpose for most local transport. Most of the information is duplicated day after day, and a great deal of time is wasted by drivers in completing the forms and by office staffs in preserving them.

In reply to a question by Mr. Wingfield Digby, Conservative Member for West Dorset, the Transport Minister, Mr. Marples, stated that he is considering proposals put to him by the British Road Federation for a 'once-for-all' system to meet these cases.

If adopted, the new system would apply to C-licensed vehicles engaged on work where the daily records seldom vary. It might take the form of an undertaking by the vehicle operator, when he applied for his licence, to conform to the restrictions on type of load and drivers' hours appropriate to his vehicle.

Vehicle Licence Changes

NEW RULES affecting excise licences for goods vehicles come into force on October 1 next.

The principal change is that it will then be possible to take out a 12-monthly licence from the first day of any month, instead of from January 1 only, as at present. The rate of tax will be the same. A licence may also be taken out for four months, starting from the first day of any month, for one-third the annual rate, plus 10 per cent.

These provisions are contained in the Road Vehicles (Period Licensing) Order, 1960.

Russian Technical Periodicals

THE Department of Scientific and Industrial Research has initiated a scheme for the translation and publication of Russian periodicals covering basic industries in order to inform industry in this country of research and development in the USSR. The Timber Development Association has undertaken to produce the journal covering timber 'Industrial Wood Processing.' It will be published monthly commencing with translation of the July, 1959, issue and thereafter until the December, 1960, issue. A complementary copy of the first issue and subscription forms can be obtained on application from the TDA at 21 College-hill, EC4.

A New Service to Industry

JABLO PLASTICS INDUSTRIES LTD.,
Jablo Works, Waddon, Croydon, Surrey

have formed a CONTRACTING DIVISION to meet specialist requirements in connection with use of JABLITE EXPANDED POLYSTYRENE for Thermal Insulation and Acoustic work.

Some recent and more important contracts which have been carried out are :—

1 Anti-condensation work with Jablite to 580 Flats for L.C.C. at Roehampton Lane.
(*Main Contractor—Tersons Limited*)

2 Jablite ceiling to 185 Flats for Fulham Borough Council at Lillie Road.
(*Main Contractor—Tersons Limited*)

3 Factory lining for Spirotex Ltd., at Falkirk.
(*Main Contractor—Costain Concrete Products Ltd.*)

4 Acoustic Ceiling to School for Bedford Corporation.
(*Main Contractor—Drabble Construction Co. Ltd.*)

5 Jablite Elastic Ceiling to Moor House (18 storey office block) in the Barbican.
(*Main Contractor—Token Construction Co. Ltd.*)

6 Factory insulation for Sir Robert McAlpine & Sons Ltd., at Peterborough.

ALL enquiries for Quotations involving
JABLITE EXPANDED POLYSTYRENE
will receive prompt attention

For people who plan right...

For people who build well

- HIGH THERMAL INSULATION
- FIRE RESISTANT
- CONDENSATION PROOF
- MORTAR ECONOMY
- LIGHT TO HANDLE
- SAVING IN MAN HOURS

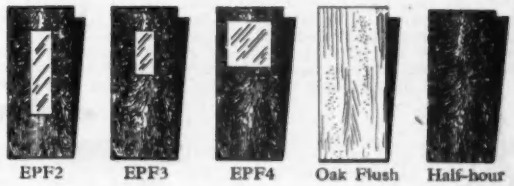
HADDON Lightweight foamed slag blocks are manufactured under strict quality control to surpass the requirements of BSS. No. 2028 1953—and every block is steam cured. Look at the many advantages the HADDON block offers—advantages that add up to better, warmer buildings and a considerable saving in time.

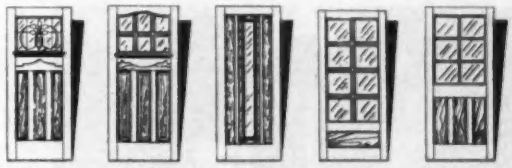
WRITE FOR FULL DETAILS TO

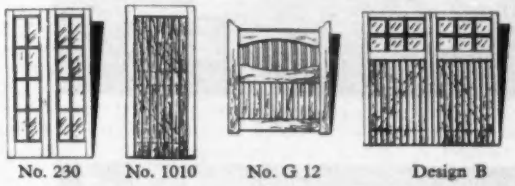
WILLIAM PRESTWICH & SONS LTD.
HADDON CONCRETE WORKS
STAVELEY, DERBYSHIRE
Tel: Staveley 391 (3 lines)

No. 2 Oak No. 4 Oak No. 5 Oak No. 212 Oak No. 20

BRYCE WHITE
FOR THE
FINEST RANGE OF DOORS


EPF2 EPF3 EPF4 Oak Flush Half-hour Fire Check


No. 9 No. 15 No. 35 No. 111 No. 350

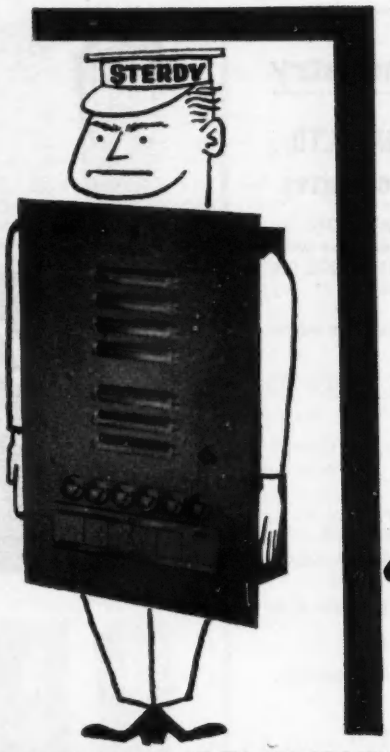

No. 230 No. 1010 No. G 12 Design B

Finest because there is such an excellent range of more than forty designs to choose from, ready for delivery. Well-made doors, in traditional or contemporary designs and half-hour fire check flush doors. Wallboard, standard mouldings and mouldings of special section also promptly supplied.
We offer a service as good as the doors themselves. A note on your trade card or letterhead will bring you our complete Illustrated Catalogue.

BRYCE WHITE
AND COMPANY LIMITED
LANGLEY, SLOUGH, BUCKS. Tel.: Langley 232
Also at SOUTHAMPTON · BRISTOL · LONDON

STERDY PORTER-

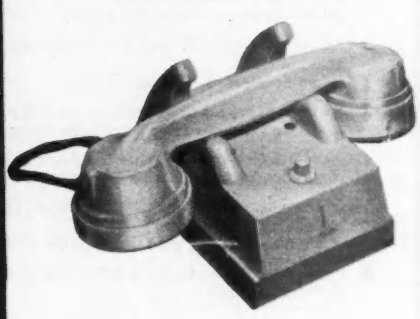
the sentry of the century



Occupiers of flats and converted houses live in peace when the Sterdy Porter is on guard. He never deserts his post of duty, never fails to answer a caller, never lets the wrong one through.

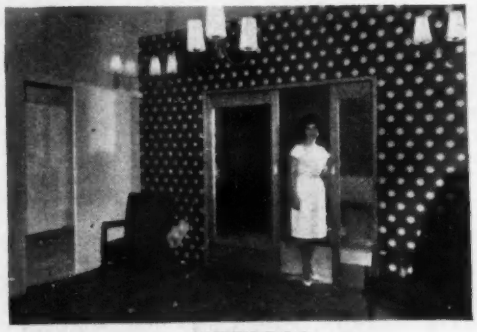
He consists of a front door speaker and individual flat telephone with occupier-operated front door releases. He enables residents to talk with all callers without leaving their fireside, admitting only those they wish to see. He's simple to install, foolproof in operation and dispenses entirely with the need for a hall porter. What could be simpler — or more essential?

Sterdy Porter Systems are available for purchase outright or on generous rental terms. Write for full details today.

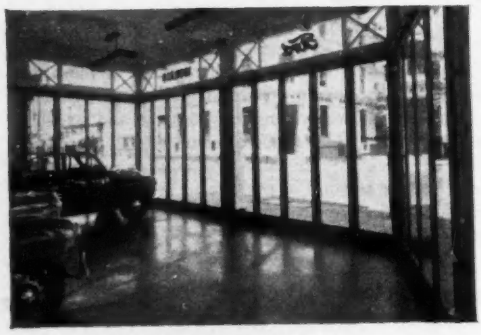


STERDY TELEPHONES LIMITED

(Incorporating W. C. Davey & Co.) Queen's House, 180-182, Tottenham Court Rd., London, W.1. Tel.: MUSeum 4414, 4415 and 6388.



'METEOR'



'RADIAL'

Sliding or Folding Doors and Partitions

run more smoothly, far longer

on ELLARD SLIDING DOOR GEAR

'METEOR'

Ellard **"METEOR"** sliding door gear is designed for use with all types of internal straight sliding doors up to 120 lbs. each in weight.
"METEOR" sliding door gear is a recent addition to the **"ELLARD"** range and incorporates the latest principles of modern design, ensuring many years of smooth, trouble-free running.

'RADIAL'

Ellard **"RADIAL"** "round the corner" type sliding door gear is suitable for private garages, council lock-ups (singly or in multiples), commercial garages, motor and motor cycle showrooms and for all openings where maximum door width is of primary importance.

A comprehensive range of *Sliding and Folding* door gear is available for any application, from a cupboard to an aircraft hangar door. Please write for literature.

ELLARD SLIDING DOOR GEARS LTD., (Desk 9) Works Rd, Letchworth, Herts. **Tel: 613/4.**
LONDON OFFICE: 5, New Bridge Street, Ludgate Circus, E.C.4. **Tel: CITy 4815.**

News in Brief

Award to Builders of the M1

AT THE ELECTION COURT DINNER of the Worshipful Company of Carmen at Trinity House on July 27, the Master, Colonel J. F. E. Pye, presented to Mr. J. M. Laing, managing director of John Laing and Son., Ltd., the 'Viva Shield' together with gold medal and illuminated citation, awarded annually by the Company for the outstanding transport improvement of the previous year. This 1959 award was in recognition of the achievement in constructing 134 bridges and 55 miles of the M1 in 19 months.

The Late Mr. Jack White

MR. JACK WHITE, manager of the Sales Promotion Department of the Airscrew Co. and Jicwood Ltd., died at his home at Walton-on-Thames on July 31. He was 48.

Milan Triennale School Exhibit

THE MAIN exterior cladding of the three-class primary school exhibited at the Milan Triennale as the central feature of the United Kingdom contribution ('The Builder' of July 22) was supplied by the Maidenhead Brick & Tile Co. Ltd. Some 17,000 tiles were used on the school.

Kent CC Reject Direct Labour

BY A LARGE MAJORITY, Kent County Council have rejected a proposal that a group of members should consider the advisability of setting up a works department to undertake by direct labour the maintenance, repair, and other building work of the Council. Opposing the motion, the chairman of the Finance committee, Mr. B. J. Pearson, told the Council that a similar resolution had twice been turned down—in 1947 and 1954.

Direct Labour at Sunderland

IN HIS second annual report to the County Borough of Sunderland's Public Works Committee, Mr. S. Stone, FIAS, MIMun.BM, states that during the period April, 1959, to March, 1960, work to the value of £252,000 was obtained by the direct labour department in open competition with private enterprise contractors. The net effective turnover of the department had increased by £170,000 to £680,000. Despite the activity of the department a number of private contractors had tendered successfully.

Building Firms Amalgamate

TWO ESTABLISHED building firms at Guildford, Messrs. Swayne & Son Ltd. and Messrs. Higlett and Hammond Ltd., have amalgamated. Messrs. Higlett and Swayne Ltd., the new firm's style, will be under the joint managing directorship of Ald. G. O. Swayne, OBE, president of the Institute of Builders, and Mr. F. H. Higlett. The combined works will be centred at Messrs. Swayne's premises in Stoke-road, Guildford.

South East London Technical College

THE PROSPECTUS for the next academic session of the Department of Building and Structural Engineering of the South East London Technical College is now available. Full, part-time day and evening courses are listed for a variety of subjects, including those leading to examinations for Ordinary and Higher National certificates, Institute of Builders diplomas, City and Guilds of London Institute certificates, and the first examination of the RICS. Short courses and special lectures to be given throughout the session are also listed. Enrolment for full-time day students begins on September 12 and for all part-time students from September 19 at the Lower Sydenham Annexe. Further details may be obtained from the College at Worsley Bridge-road, Lower Sydenham, London, SE26.

Personal Column

MR. JOHN B. HENDERSON has joined Fablon Ltd., manufacturers of polythene film and self-adhesive plastic covering—of 49 Parklane, W1, as product manager of the building division.

Carter Tiles Ltd. announce the appointment of MR. A. G. STRINGER as managing director of Carter Tiles Limited, Poole, Dorset. Another appointment to the board is that of MR. G. F. H. WALKER, OBE, TD, who will mainly be concerned with the direction of the sales force covering the British Isles.

MR. A. R. CURRY has been appointed sales manager of Messrs. C. Dejong & Co. Ltd. (one of the Clark & Fenn Group) and will be responsible for fibrous plasterwork and plaster tiles for ceilings of schools and industrial buildings.

Austins of East Ham Ltd. announces a new member of its board of directors, in the appointment of MR. RICHARD A. AUSTIN as an assistant director. Mr. Austin is of the fourth generation of the family in the control of the business, which was founded by his great-grandfather almost 100 years ago.

British Insulated Callender's Cables Ltd. announce the appointment of MR. P. M. HOLLINGSWORTH, MENG, MIEE, AMIEE, as assistant chief engineer with effect from July 1.

Company News

H. & R. JOHNSON LTD. recommend the payment of a dividend of 17½ per cent (less tax) on the ordinary shares of the company for the year ended March 31, 1960.

MAGNET JOINERY LTD. recommend the payment of a dividend of 30 per cent (less tax) on the ordinary stock of the company for the year ended February 29, 1960.

AT an extraordinary general meeting of THE BRITISH OXYGEN CO. LTD in London recently a resolution that the £17,047,166 ordinary stock of the company be re-converted into 68,188,664 ordinary shares of 5s. each (unnumbered) and that the 5,452,834 unissued shares of £1 each be sub-divided into 21,811,336 shares of 5s. each was carried. A resolution making the necessary alteration to the articles of association of the Company was also carried.

OVERSEAS BUILDING

From Our Own Correspondents

CANADA (ALBERTA).—The Canadian Government at Ottawa, Ontario, has invited tenders for the construction of the structural steel and steel decking for the proposed new terminal building at Edmonton International Airport. . . . The Canadian Chemical Co. has announced a $4m. plant-expansion construction project at Edmonton. . . . The Canadian Fine Oil Co. is to construct a $4.5m. building at Calgary.

CANADA (BRITISH COLUMBIA). — The Canadian Liquid Air Co., Ltd., has invited tenders for the construction of a new plant in Vancouver. . . . The Commonwealth Construction Co. has been awarded the first contract in connection with Alcan's new $1.6m. plant at Kitimat. . . . The President of the Peace River Development Co. has announced that construction of the first tunnel, on the $630m. Peace River Hydro Power Project, might start in the autumn.

CANADA (NEW BRUNSWICK). — Kresge, Ltd., are considering the construction of a new departmental store on the old City Market property at Saint John.

CANADA (ONTARIO).—Slazenger Canada Ltd., subsidiary of Slazenger's England, is to build a new plant in Toronto. . . . The Ford Motor Company has announced plans for the construction of a glass fabrication plant in Crowland Township, near Niagara Falls. Land, building and equipment is to cost approximately $6m.

CANADA (ONTARIO).—A contract for the construction of four bridges and more than a mile of the new Queensway in Ottawa has been let by the Department of Highways. . . . A $1.6m., 3-storey university centre building is to be constructed at Assumption University, Windsor. . . . Tenders are to be called in November for the construction of Toronto's $8m. expansion to the Sick Children's Hospital. Messrs. Goven, Ferguson, Lindsay, Kaminker, Langley and Keeleyside, of Toronto, are the architects. . . . Taylor-Woodrow (Canada), Ltd., are to construct the new Ontario Hospital Association's headquarters building in Flemingdon-park, Toronto. Completion is scheduled for 1961.

CANADA (QUEBEC).—The Provincial Government has announced that all public works projects will now be placed out for public tender. . . . Price Brothers Ltd. has announced the general contract for the construction of a $22m. pulp mill at Kenogamy. . . . The Quebec Hydro-Electric Commission plans capital expenditures of $724m. in 1960-64.

DOMINICAN REPUBLIC.—The firm of Luis M. Bonnet are engaged in studies for the construction of an aqueduct to cater for the increased demands of the area around the new township of Padre las Casas.

INDIA.—The Government is negotiating a $2½m. loan to finance the foreign exchange costs of the construction of a 27,000-kW hydroelectric power plant for ancillary transmission and substation facilities for the project in Assam.

The main structure of the project (known as the Barapani Project) will be a concrete dam 210 ft. high and 580 ft. long on the Umian River about 300 miles north-east of Calcutta.

ISRAEL.—An entirely new international airport is to be constructed north-west of the present Lod (Lydda) terminal. It will cost more than I£35m. and is scheduled for completion by 1965.

ISRAEL.—The governor of the Bank of Israel, Mr. Horowitz, has announced successful negotiations with the International Bank for Reconstruction and Development for a loan to Israel of $27½m. The loan is to be advanced for a period of 25 years and will be used for the construction of a new harbour on the Mediterranean coast at Ashdod. The total cost of the harbour is estimated at $46m.

KENYA.—A £½m. rayon-manufacturing plant is to be built at Mombasa by the Kenya Rayon Mills Ltd.

MALDIVE ISLANDS. — Mr. Alport, Minister of State for Commonwealth Relations, in a written statement on July 28 in the House of Commons on progress with development projects in the Maldive Islands, stated that the Maldivian Government had been considering improvements and some enlargement of the harbour at Male. Arrangements were being made to carry out an engineering survey which was the necessary preliminary to any large-scale construction work. The UK government had undertaken to build and equip a hospital at Male.

MEXICO.—Mexican technicians are to make a fresh study into the possibility of cutting a canal across the Isthmus of Tehuantepec to form a new link between the Pacific and Atlantic Oceans. . . . A large hydro-electric power plant and dam is to be built at El Infiernillo in the State of Michoacan.

NEW ZEALAND.—The Government has approved the preparation of working drawings for a new multi-storey General Post Office at Wellington. It is being planned by the Ministry of Works.

NIGERIA.—A new £1m. power station is to be built near Okoloma village, near Afam, to supply electricity to Port Harcourt and several other towns in Eastern Nigeria. It will be operated by natural gas from the Afam oilfields and is expected to go into operation in July, 1962.

PORTUGUESE EAST AFRICA.—The Beira Municipality has been authorised to borrow Esc. 8,700,000 for the construction of two large buildings to house various Government departments and two markets. . . . Plans are being studied for the following improvements: Extension of the main quay at Lourenco Marques by a further 300 to 400 metres; construction of a new tanker quay for the oil installations at Matola; reconstruction of some of the older quays at Beira; and a new port on Lake Nyasa to be the terminal point of the railway from Nacala.

SOUTH AFRICA (NATAL).—A start will be made this year on the Pongola irrigation scheme in Northern Natal. The scheme includes a dam and irrigation canals and will cost about £19m.

TASMANIA.—The contracts awarded to Building and Engineering Constructions (Aust.) Ltd for the Tasmanian University arts block, and the Mersey Maternity Hospital at Devonport, have been cancelled.

UGANDA.—Stirling Astaldi (Uganda) Co., Ltd., has been awarded a contract valued at £321,000 for earthworks on a rail cut-off designed to shorten the line between Tororo and Jinja.

SCOTTISH BUILDER

Housing in Scotland

SINCE THE end of the war nearly 400,000 permanent houses have been built in Scotland. Figures issued recently in the Housing Return for Scotland of June 30 show a total of 395,683. Of this figure 291,978 have been built by local authorities and 46,343 by the Scottish Special Housing Association. Other tables in the return show that the number of houses under construction at the end of June was 32,318, compared with 29,509 at the same time last year. The Housing Return for Scotland is published by HM Stationery Office, price 1s. 3d.

Appeal for Grant

AN appeal to the Scottish Office to provide financial assistance for a £3m. modernisation programme at Dalmarnock sewage works is to be made by the highways committee of Glasgow Corporation. The committee have already been told that the programme does not rank for Government grant.

The view has been expressed that if no Government financial assistance is obtained the cost of the modernisation programme will have a serious effect on the Glasgow rating position. In seeking financial support for the project it will be pointed out that the Dalmarnock sewage works serves one of the most heavily industrialised areas in Glasgow. It is hoped to make an early start on the Dalmarnock project, which will take three years to complete. The modernisation of the Shieldhall and Dalmuir works will follow, and the highways committee also propose to build three new main sewers at a cost of £5m.

Specify—

WALLEY'S

CLAY ROOFING TILES

AND

FACING BRICKS

"WALLEY-SILVERDALE"

The Hallmark of Quality Products with the Highest Degree of Durability

Prices and Samples sent on request.

T. E. WALLEY LTD.

ROSEMARY HILL TILERIES

SILVERDALE • NEWCASTLE

STAFFORDSHIRE

Telephone: SILVERDALE 343/4

Scottish Representative: J.G.W. MUIRIE, 12 Lothian Drive, Clarkston, Renfrewshire. Tel.: Giffnock 1516

Lancs. Representative: W. REDMAN, 11, Deneway, High Lane, Stockport, Cheshire. Tel.: Disley 2034

SCOTTISH BUILDING TRADE WAGES

FOLLOWING are rates of wages authorised by the Scottish National Joint Council as from April 18, 1960. They apply to the whole of Scotland, including the islands of Orkney, Shetland, etc.

Grade A: Craftsmen, 4s. 11½d.; Labourers, 4s. 4d.

For apprentices, the rates are :

Year	Percentage of Craftsman's rate	For week of 44 hours s. d.
1st	25	54 6½
2nd	33½	72 9
3rd	50	109 1
4th	66⅔	145 6
5th	75	163 7½

For female labour, the rates are :

	s. d.
Operatives on craft operations (at end of probationary period)	4 4
Operatives on labouring operations (at end of probationary period) ...	3 10

New Edinburgh Schemes

A HOSTEL for single men, to be sited at Niddrie Mains Farm; an extension of the Corstorphine branch library; and a £114,000 improvement and extension of the Gayfield-square divisional police headquarters are among development projects which have now received the approval of Edinburgh Town Council.

The hostel scheme, including elderly persons' houses, a warden's house, furnishings, site preparation, and professional fees is estimated to cost a total of about £131,000. The estimated cost of £114,000 for the Gayfield-square divisional police headquarters improvement includes £78,400 for building work, £12,900 for heating and air conditioning, £5 000 for furnishings, and £7,700 for demolition and site works.

Preservation of Renfrewshire Village

A SUBSTANTIAL part of the 18th-century village of Eaglesham, in Renfrewshire, is to be preserved. Fifty-one buildings of architectural and historical interest have been included in the preservation order issued under the Town and Country Planning Acts.

New Buildings

AYR.—A total of 12 warrants for building works costing £362,290 have been granted by Dean of Guild Court. The petitions cover industrial, commercial and housing developments.

FIFE CC.—Erection of 38 houses at Methilhill. 'All trades.' County C. Applications by August 13.

FORTH ROAD BRIDGE JOINT BD.—Construction of the approach viaducts of the Forth Road Bridge. This work will include:—(1) Piers and foundations. (2) Abutments. (3) Deck, including girders and roadway. Applications to Mott, Hay & Anderson, constg. engrs., 9 Iddesleigh-hse., Caxton-st., London, SW1. Dep. £10. Tenders by October 14.

GLASGOW.—The House of Fraser have applied for planning permission to build an additional storey to their new store at Argyle-st., between St. Enoch-sq. and Jamaica-st. The application is being considered by a planning sub-committee of the corporation.

HAMILTON.—Dean of Guild Court have approved plans for the erection of 122 houses and 41 lock-up garages at Udston-Hillhouse scheme. Est. £195,000.

WALPAMUR PAINTS

do a wonderful job

Beautiful colours . . . lasting perfection of finish . . . for inside and outside use . . . Walpamur Quality Paints do a wonderful job. Constant laboratory testing at every stage of manufacture ensures the consistently high quality on which is based the international reputation of these famous paints.

DURADIO 5-YEAR ENAMEL PAINT is unsurpassed for interior and exterior decoration.

WALPAMUR WATER PAINT is ideal for walls and ceilings; a special Exterior Quality is also available.

WALPAMUR EMULSION PAINT is quick-drying with long-lasting results and washes like new.

For further details of these and other Walpamur products write to The Walpamur Co Ltd., Darwen, Lancs.

BY APPOINTMENT TO HER MAJESTY THE QUEEN MANUFACTURERS OF PAINT THE WALPAMUR CO LTD DARWEN, LANCS

THE WALPAMUR CO LTD • DARWEN & LONDON

Paints Enamels and Varnishes for every possible need

W916

Photograph by courtesy of London Transport Executive.

"Winslot" Type 3 solid panel fencing, 12 ft. high, erected at Cockfosters Train Depot as a windbreak. This quality fending is made in various heights from 1 ft. to 12 ft.

"Winslot" Palisade design is also available with pre-stressed pales from 3 ft. to 8 ft. high and is an ideal alternative where an open design is required.

In areas of England, Wales and Northern Ireland not covered by Metropolitan Concrete Works Ltd., economic supply and erection services are available by selected manufacturing Licensees.

All Enquiries to the proprietors of "Winslot" registered designs:

METROPOLITAN CONCRETE WORKS LTD.,
Imber Court, East Molesey, Surrey. Phone: Emberbrook 2211/2

Experienced staff will survey your site and erect the fence.

GLASCRETE CURTAIN WALLING

The Glascrete Curtain Walling to this factory for Imperial Chemical Industries Ltd., at Middlesbrough, comprises granolithic mullions and transoms with infill panels of " Escol ". The heights of the three windows shown are 73 ft., 44 ft., and 21 ft.

Further information and details of all Glascrete Constructions are contained in our comprehensive brochure P.47 which we shall be pleased to send on application.

J. A. KING & Co. Ltd.
181 Queen Victoria St. LONDON, E.C.4
Telephone: Central 5866 (5 lines)

THE BUILDER CONSTRUCTION NEWS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those preceded by the symbol (A) are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. The symbol (R) preceding each entry indicates that applications must be received by this date.

BUILDING

AUGUST 12

ANTRIM EC.—Proposed teacher's residence and garage at Moorfields nr. Ballymena. Director of Education, 475 Antrim-rd., Belfast. Dep. £5.

AUGUST 16

(AR) BIRMINGHAM CITY C.—Firm price tenders for:—(a) Eight four-storey dwellings and one shop at Pool Farm estate, Kings Norton. (b) 12 three-storey dwellings at Bunbury-rd. estate, Northfield. City A. Dep. £2 2s. (each contract). Tenders by Sept. 16.

(AR) ROSS-ON-WYE UDC.—Fixed price tenders for a block of four flats with drains and paths, etc., at Brampton-ave., Berryfield estate. Edgar F. Young, chartered quantity surveyor, 4 Imperial-sq., Cheltenham. Dep. £2 2s. Tenders by Sept. 17.

AUGUST 17

ANTRIM CC.—Construction of library at Andersonstown. Northern Ireland Housing Trust, 12 Hope-st., Belfast. Dep. £3.

AUGUST 18

(AR) GATESHEAD BC. — Erection of Greenwell county sec. sch. for girls (four-form entry). Boro' S.

(AR) SWANSEA CBC.—Erection of sports pavilion at King George V playing fields. Boro' A. Dep. £5.

AUGUST 19

DOWN (Ulster) COUNTY HEALTH COM.—Erection of a new child health clinic at Knocknee-ave., Kilkeel. County Planning Officer, English-st., Downpatrick. Dep. £3 3s.

(AR) SOUTHWICK UDC. — Fixed price tenders for 32 shops, 32 flats and maisonettes over, and 32 garages, in four three-storey blocks at town centre. C.

AUGUST 20

(AR) BATH CITY C.—Demolition of 53 properties and the erection of 94 dwellings, 35 garages and a laundry at Snow Hill redevelopment. Snailum & Le Fevre, architects, 18 Brook-st., Bath. Dep. £2 2s.

(AR) ESSEX CC.—Firm price tenders for:— (a) Provision of oil-fired central heating at civil defence headquarters, Danbury Park, nr. Chelmsford. (b) Provision of car parks at South West Essex Technical College. (c) Hostel for elderly persons' at Shernhall-st., Walthamstow. (d) New kitchen at Great Bardfield county prim. sch. (e) Erection of Shelley county jun. sch. (f) Internal redecorations at Grays county technical sch. County A. (separate applications).

(AR) MITCHAM BC.—Erection of 157 dwelling at Phipps Bridge redevelopment scheme. Boro' E&S. Tenders by October 5.

(AR) SOUTH SHIELDS DISTRICT HOSPITAL MANAGEMENT COM.—Erection of new x-ray dept. at Ingham Infirmary. Group Secretary, Ingham Infirmary, South Shields.

AUGUST 22

(AR) HEREFORDSHIRE CC.—Formation of playing fields at new county sec. sch., Kington. County A.

(AR) WEST SUSSEX CC.—Fixed price tenders for a two-classroom instalment at new sch., Fernhurst, nr. Haslemere. County A.

AUGUST 24

ANTRIM EC.—Proposed new prim. sch. and meals kitchen at Knockaholet, nr. Ballymoney. T. J. Dudley Lewis, quantity surveyor, 22 New-row, Coleraine. Dep. £5.

AUGUST 25

NORTHERN IRELAND MINISTRY OF COMMERCE.—Construction of factory on No. 8 Site, Dunmurry industrial estate, Dunmurry, Belfast. Room 28, Chichester-hse., 64 Chichester-st., Belfast. Dep. £3.

AUGUST 26

(AR) DORKING UDC.—Fixed price tenders for 29 dwellings at Hampstead-rd. C. Dep. £2.

(AR) EAST SUSSEX CC.—Alterations, adaptations and repairs to drill hall to form new civil defence training centre at Hailsham. County A.

AUGUST 29

(AR) HUNTINGDONSHIRE CC. — Fixed price tenders for a proposed three-bay fire station at Ramsey. County A.

(AR) NORTHUMBERLAND CC.—(a) Construction of a four-bay lock-up garage, workshop and stores block, with all services, at proposed highway depot, Haag Head, Wooler. (b) Construction of two-bay lock-up garage and workshop and stores block, with all services, at Station-rd., Belford. County S. (Separate contracts.)

(R) THURROCK UDC.—Proposed covered swimming pool and public hall. E&S.

(AR) WATFORD RDC.—Erection of a social centre at Oxhey-pl., South Oxhey. Clerk to Council. Dep. £2 2s.

AUGUST 31

ROSCOMMON (Eire) CC.—Erection of 12 houses, with siteworks and development, at Lanesborough-st., Roscommon. Desmond MacGreevy, chartered quantity surveyors, 4 Merrion-sq. North, Dublin. Dep. £10.

SEPTEMBER 5

(AR) HOVE BC.—Erection of 26 houses and 36 flats at Chichester-close. Boro' E&S. Dep. £3 3s. Tenders by Oct. 18.

SEPTEMBER 6

(A) CARDIFF CITY C.—Fixed price tenders for alterations and additions to seating accommodation in the Council Chamber, City Hall. City A. Dep. £2 2s.

LISBURN (Ulster) UDC.—Construction of 124 dwellings and 43 garages, with roadworks and siteworks, at Warren Park, Lisburn. Town Surveyor, Town Hall, Lisburn. Dep. £5

KIRKSTONE

GREEN SLATE FOR WALL CLADDING, CILLS, COPING, FLOORING, PAVING, ETC.

The slate from our quarries has been used for these purposes for over 50 years. Our accumulated experience is offered to Architects and Contractors in the services of our Technical Staff and illustrated literature.

Service in Slate
KIRKSTONE GREEN SLATE QUARRIES Ltd.
Ambleside, Westmorland

Tel.: Amb. 3270

SEPTEMBER 9

(A) DOVER BC.—Fixed price tenders for 20 housing units, with site and ancillary work, at St. David's-ave., Aycliffe. Boro' E. Dep. £2 2s.

(A) EAST BARNET UDC.—Fixed price tenders for two-storey block of 18 dwellings, a warden's flat and incidental work at Bulwer-rd., New Barnet. E&S. Dep. £2 2s.

(A) YORK CITY C.—Fixed price tenders for a block of 13 flats at Albert-st., Walmgate, York. City A. Dep. £3.

SEPTEMBER 10

(AR) HESTON & ISLEWORTH BC.—Erection of public convenience at Broadway, Hounslow. Boro' E&S.

SEPTEMBER 12

(A) HUNTINGDON CC. — Fixed price tenders for one police house at Sawtry and one at Stilton. County A.

(A) WIGAN CBC.—Fixed price tenders for 27 dwellings at Drummond-sq. site, Laithwaite housing estate. Boro' & Water E. Dep. £2 2s.

SEPTEMBER 13

(A) BOURNEMOUTH CBC.—Fixed price tenders for a sports pavilion at Meyrick Park. Boro' A. Dep. £2 2s.

(A) CARDIFF CITY C.—Fixed price tenders for 219 garages (eight contracts). City A. Dep. £2 2s. (each contract).

(A) CARDIFF CITY C.—Fixed price tenders for:—(a) 105 dwellings at Rumney; (b) 39 at Butetown, and (c) 50 at Ely North. City A. Dep. £2 2s. (each contract).

(A) CARDIFF CITY C.—Fixed price tenders for:— (a) 46 dwellings at Shaw-close, Llanrumney; (b) two at Hazlett-close, Llanrumney; (c) 22 at Grangetown. City A. Dep. £2 2s. (each contract).

(A) MIDDLESBROUGH CBC.—Erection of a children's home at Croft-ave. Boro' E. Dep. £2 2s.

SEPTEMBER 16

(A) FARNHAM UDC.—Fixed price tenders for one pair of three-bedroom houses at Baldreys. Gilbert & Hobson, architects, 69a Castle-st., Farnham, Surrey. Dep. £2.

(A) STAINES UDC.—Fixed price tenders for 36 dwellings and 44 garages at Town-la., Stanwell, Middx. C. Dep. £2 2s.

SEPTEMBER 22

(A) LUTON BC.—Fixed price tenders for 18 flats in three blocks at Lewsey Farm estate. Boro' A.

SEPTEMBER 29

(A) CARDIFF CITY C.—Fixed price tenders for a teachers' training college, Cyncoed. City A. Dep. £2 2s.

OCTOBER 3

(A) SWINTON & PENDLEBURY BC.—Erection of 70 houses and six blocks of four flats, with roads and sewers, at Beehive estate, Clifton, Lancs. Boro' E&S.

NO DATE

(A) HACKNEY MBC.—Conversion into self-contained flats and houses of houses too large for single family occupation. Housing Mgr.

SERVICES, PAINTING, MATERIALS, ETC.

AUGUST 20

(AR) BOURNEMOUTH CBC.—Sub-contracts:—(a) Central heating installation, and (b) stonework at new sports pavilion, Meyrick Park. Boro' A.

AUGUST 22

(AR) STEPNEY MBC.—Following sub-contracts for Martineau-st. housing scheme (stage 1—comprising 75 dwellings and two shops): —(a) Thermoplastic tile flooring (3,250 yds. super); (b) frostproof wall tiling (380 yds. super), and (c) asphalt roofing (1,170 yds. super); asphalt paving (580 yds. super); and tarmacadam paving (260 yds. super). Howes & Jackman, architects, 1, Verulam-bldgs., Gray's Inn, WC1. Tenders by September 12.

(AR) STOCKTON-ON-TEES BC.—Services, etc. Boro' A.

AUGUST 24

LARNE BC.—Exterior painting of 338 council houses within Borough. TC, Gardenmore-hse., Larne, Co. Antrim. Dep. £5 5s.

AUGUST 26

(A) WANSTEAD & WOODFORD BC.—Supply of approx. 180yd. of 2ft. 9in. high concrete palisade fencing to perimeter of Christchurch Recreation Ground, Wanstead. Boro' E. Dep. £2.

AUGUST 31

(AR) CRAYFORD UDC.—Firm price tenders for replacement of baths, sinks, windows and installation of lavatory basins in 970 pre-war houses in Crayford. E&S.

(A) DEPTFORD MBC.—Internal redecoration works to post-war properties. Boro' E&S.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

AUGUST 15

(R) TENBURY RDC.—Fixed price tenders for laying of 30 miles of 3, 4 and 6in. dia. asbestos-cement water mains, for the construction of a 185,000 gal. rc reservoir and a brick pumping station, etc. John Dossor & Associates, constg. engrs., 54 Broad-st., Worcester. Dep. £5 5s. Tenders by Sept. 12.

SEPTEMBER 3

EAST ELLOE RDC.—Laying of approx. 37,775yd. of 3 and 4in. dia. asbestos-cement class 'B' pipes, with ancillary works, etc., in various parts of district. Water E&M. Dep. £2 2s.

SEPTEMBER 7

BATHAVON RDC.—Fixed price tenders for the construction of approx. 4,653 lin. yd. of 6in. dia. and 416 lin. vd. of 9in. dia. glazed stoneware pipe sewers with necessary manholes and appurtenant works in the Parishes of Corston and Newton St. Loe. with the construction of a sewage disposal works, comprising screen chamber, two upward flow primary settlement tanks, two circular filters, two humus tanks, and six sludge beds, together with a small pump house, in the Parish of Corston. E&S. Dep. £3 3s.

DEWSBURY CBC.—Construction of 3,770 sq. yd. of tarmacadam carriageway and 2,120 sq. yd. of footpaths in connection with High-st. improvement (Westtown redevelopment). Boro' E&S. Dep. £2 2s.

SEPTEMBER 12

(A) HOLLAND (Lincs.).—Diversion of existing main sewer, and construction of new access road, and temporary and permanent fencing, etc., at Boston College of Further Education. County A.

GENERAL BUILDING WORK

(LONDON)

HOLBORN.—Office Development. — The Bernard Sunley Organisation have acquired a freehold site at 69/73 Theobalds-rd. for £83,000, and are to proceed immediately with the construction of an office and showroom building of approx. 16,000 sq. ft. overall—not 166 sq. ft. as was stated in our last issue. The building will include a private garage in the basement. Architects are Richardson & McLaughlan, LRIBA, London.

(PROVINCIAL)

ANGLESEY.—Central Electricity Generating Bd. propose erection of nuclear power station at Wylfa.

ASHTON-UNDER-LYNE. — Forty single-bedroomed flats are to be built by the TC at Vicarage-cres. at a cost of £49,040.

CASTLEDERG (Co. Tyrone).—RDC have approved a plan to re-surface 5 miles of roads next year. Est. £12,500.

CHRISTCHURCH.—BC has approved plans for new town hall. Est. £87,624. Building will include a main hall to seat 500, a small hall to seat 100 and sufficient accommodation to meet BC's demands. It is intended to demolish present town hall and replace with arcade of shops, leading to new building. . . . BC has approved plans for the provision of a covered swimming pool, est. £27,000, on the Mayors Mead site.

CLAYTON-LE-MOORS.—The Governors propose extensions to All Saints jun. sch.

ESTON (Yorks.).—Shannon (Contractors) Ltd., 44 Marsh-rd., Middlesbrough, are planning housing and shopping developments at Lodge Farm, Eston. The scheme includes 500 houses, a shopping centre with 31 shops, hotel, social club, garage and filling station.

LEEDS.—Blocks of flats, 22-storeys high, are to be built by Leeds Housing Com., and will be twice as tall as any at present erected in the city—highest of which so far are of ten storeys. The first 22-storey block will be built in Charing Cross-st., off Woodhouse-st., and two other blocks are planned for the Lincoln Green redevelopment area.

MORPETH.—MH & LG have decided to allow the development of land at Cresswell Hall as a site for 150 caravans for Mr. T. R. Holmes, a Newcastle-on-Tyne businessman.

NORTHUMBERLAND.—Graham & Son Ltd., of Forest Hall, Newcastle-upon-Tyne 12, was the successful tenderer for a new prim. sch. at Ovingham for the CC (see page 308). This corrects information which appeared in our issue of Aug. 5.

NOTTINGHAM.—EC propose erection of school for sub-normal children at Clifton. Est. £41,000. . . . Following for TC:—10 flats and six aged persons' dwellings/26 garages at Bilborough estate; 12 flats and two garages at Robin Hood Chase.

OXFORD.—City C has approved scheme for building the new Donnington Bridge to link south and east Oxford over the Thames. Est. £400,000.

PARTINGTON.—RC Auth. propose erection of new RC Church at Chapel-la., after demolition of Tower House.

RAMSGATE.—TC have approved erection of new hall and offices for Labour Party on sites of Nos. 143-147 High-st.

RAWTENSTALL.—BC propose erection of 14 houses at Dean-la., and 40 flats, 24 houses and eight bungalows at Crawshawbooth area.

READING.—TC has approved scheme to build new civil defence depot at Abattoirs-rd., Reading. Est. £20,740. . . . BC is to proceed with erection of further 123 dwellings and 40 garages on Bulmershe estate this year. Work is also to begin this year on erection of 30 flats and 24 garages on vacant land at Coronation-sq. on Scuthcote estate. Flats are to be specially adapted to provide accommodation for disabled persons.

ROCHDALE.—Manchester Regional Hospital Bd. propose erection of new out-patient dept. at Rochdale Infirmary.

SCARBOROUGH.—Boro' E has prepared a scheme for the redevelopment of housing sites at Whitehead Hill and St. Mary's-st. areas.

SHREWSBURY.—The Brixton Development Co. Ltd., London, are planning to build a 20-acre industrial estate at Harlescott, Shrewsbury. Plans deposited with Shrewsbury Corporation envisage a total of 17 factories on the site, with 13 of them each of 18,000 sq. ft.

SILSDEN.—UDC propose erection of 32 flats/houses at Sackville-rd. estate.

STAFFS.—County EC propose expenditure of £40m. on education during 1960-62.

STANLEY.—UDC propose erection of 26 bungalows/74 dwellings and 14 garages at Good-st.

WELLINGTON. — George Calverley & Sons (Contractors) Ltd., Leicester, propose development of 24½ acres land at Teagues Bridge-la. Trench, for housing purposes.

WIGAN.—Extensions and alterations to the Standishgate store of F. W. Woolworth & Co. Ltd. have been approved by the Planning Com.

TENDERS

(A) Denotes *accepted*.
(PA) Denotes *provisionally accepted*.
(RA) Denotes *recommended for acceptance*.
(AM) Denotes *accepted subject to modification*.
(GD) Denotes *accepted subject to approval by appropriate Government Department*.

ABINGDON.—Erection of 18 flats at Appleford-drive. for BC. (A) W. H. Poulton, £28,260.

AMERSHAM.—Information was given in our issue of July 1 that a contract for two 9-storey r.c. frames at St. George's estates had been placed by the RDC. We are informed that this information is incorrect and that the contract has not yet been awarded.

ASHTON-UNDER-LYNE.—Erection of 40 flats at Vicarage-cres. for BC. (A) Homeville Co. Ltd., Maidenhead, Berks.

ASHTON-UNDER-LYNE. — Firm price tenders for a three-storey block of six flats and a three-storey block of six shops and 12 flats, with garages, at Hazelhurst estate for BC. Boro' E&S is Allen Fisher. Quantities by Eaton & Edwards, Manchester. (A) Middleton & Co. (Contractors) Ltd., Bank Top Mill, Trout-st., Preston, £64,212.

BELFAST.—Erection of Queen's University students' community centre at 7 College Park for the Presbyterian Church in Ireland. Robert McKinstry architect. (A) Thornbury Bros., 23 Ravenhill-rd., Belfast. Est. £43,000.

BILLINGHAM (North'd.).—Erection of 21 houses at Otterburn for RDC. Architects are W. H. Williamson & Ptnrs., 7 St. Mary's-pl., Newcastle-on-Tyne. (A) Thomas Muckle & Sons, Rothbury, Northumberland.

BOLTON.—New foundry/machining bays and pattern shop on 75-acre site for The Walmsley (Bury) Group Ltd. (A) G. & J. Seddon Ltd., Little Hulton, Manchester.

BRIDGEND.—Erection of store at Derwen-rd. for Co-operative Society Ltd. J. Morgan Harries, architect. (A) Rush & Tompkins Ltd., £82,000.

BRIERLEY HILL.—(1) 34 houses at School-st., Pensnett (scheme 'D'), and (2) 22 houses and one lock-up shop at Sheffield-st., Quarry Bank (scheme 'G') for UDC. (A) A. & T. Garratt Ltd., High-st., Pensnett, nr. Brierley Hill and Buildings & Equipment (Sedgley) Ltd., 55 Darlington-st., Wolverhampton, respectively.

CAMBERWELL.—Factory extension at Blakes-rd., SE15, for Samuel Jones & Co. Slater & Uren, architects. (A) Rush & Tompkins Ltd., £18,000.

CARLISLE.—Conversion of Harraby estate from open to closed planning for City C. (A) Direct labour, £23,392.

CHESTER-LE-STREET.—Erection of 143 houses and 54 garages, and the construction of roads and sewers for 189 houses to complete the West-la. housing estate for UDC. (GD) Direct labour.

CLERKENWELL.—Erection of an office block at St. John's. Campbell-Jones &

Contracts Placed

We are glad to receive from architects and quantity surveyors for publication details of contracts placed to the value of £20,000 or over. Such information should reach the Editor as soon as possible after the contract is signed. Names of the architect and other consultants associated should be given.

THE
BODDY
ROOFING
COMPANY LTD

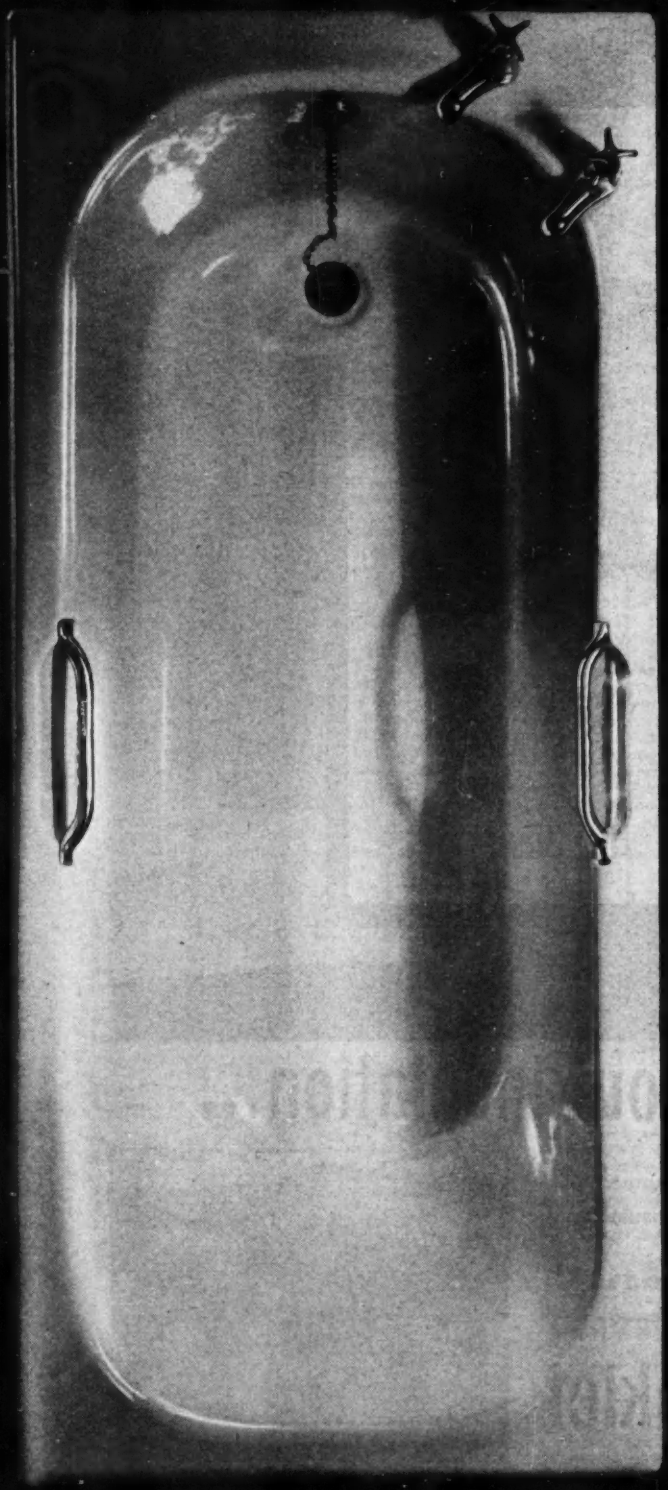
Specialists in

ASBESTOS CEMENT
MATERIALS
PROTECTED METAL
ROOF INSULATION
SLATING
TILING

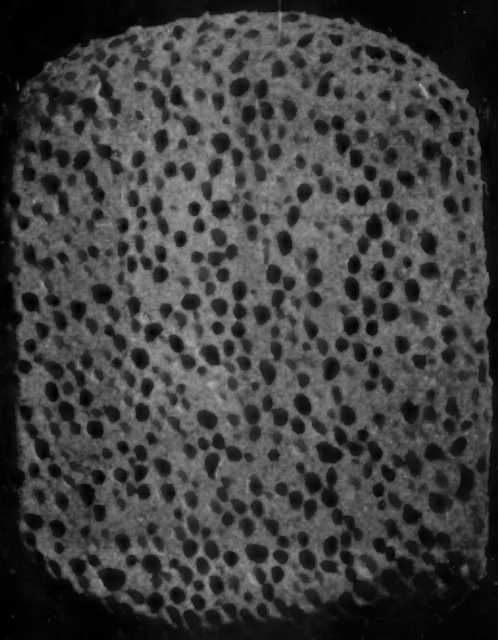
The principals and technical staff are available for consultation to architects, surveyors, structural engineers and contractors for any type or specification of roofing materials without obligation.

81 ESSEX RD • ISLINGTON
LONDON • N.1

Telephone: CANonbury 4281
(Private Exchange)



For design,
finish . . .
choice of sizes
and colours,
Architects and
Builders need
look no further
than Bilston, the
Bath Specialists



ATLANTA
MAGNA
CRESTA
MARINÅ
MERMAID
BERMUDA
PRINCESS

BILSTON

Illustrated literature sent on request Bilston Foundries Ltd Bilston Staffs

when they ask about insulation...

This booklet has been specially prepared to answer your customers' enquiries about domestic insulation. It covers all aspects—insulation of the attic, pipes, tanks and hot water systems—and has been designed to make the householder 'insulation conscious'. This booklet will both answer enquiries and promote new business.

give them this booklet

Send for a specimen copy, write to:—

William Kenyon & Sons (MetaMica) Limited

Dukinfield, Cheshire. Ashton-under-Lyne 1614/7 & 3673/6

Manufactured by **THE CAPE ASBESTOS COMPANY LIMITED**, 114 & 116. Park Street, London, W.1.

TA3625

Sons, Architects. (A) Pauling Construction Co. Ltd., £150,000.

COVENTRY.—Following for City C:—Construction of a roundabout at junction of London-rd. with Whitefriars-st. and Gulson-rd. (A) Galliford & Son Ltd., £67,774; erection of three shops in Smithford-way. (A) John Laing & Sons Ltd., £20,039 (second lowest tender); erection of 97 garages. (A) Ernest Batley Ltd., £13,696; erection of a 10-storey block of flats in The Butts. (A) George Wimpey & Co. Ltd., £121,136.

DERBY.—Erection of new depot and stores at Osmaston Park industrial estate, Gosforth-rd. R. W. Ingram, architect. P. S. Rathbone, quantity surveyor. (A) Ford & Weston Ltd., £17,706.

DUNFERMLINE.—Erection of three twelve-storey blocks of flats (71 dwellings in each) for Royal Burgh. (A) G. Wimpey & Co. Ltd., £452,149.

DUNGENESS (Kent).—Supply and installation of all functional electrical equipment for the new Trinity House lighthouse. (A) Pelapone Ltd., Derby.

EASTBOURNE.—Erection of 24 houses at Sports Farm housing estate for CBC. Boro' S is D. Williams. Ellis (Eastbourne) Ltd., Etchingham, £43,900.

ECCLES.—Erection of 40 houses at New Hall Farm site for BC. Boro' E&S is D. C. Kean. Quantities by T. Sumner Smith & Ptnrs. (A) C. Topham & Sons, Berry-st., Peel Green, Eccles, £67,997.

EDENBRIDGE.—Erection of two blocks of flats and other works at Stangrove Park site for LCC. (A) Perryman (Building Contracts) Ltd., Tonbridge, Kent, £73,394.

FELTHAM.—Erection of office block at Feltham, Middx. Campbell-Jones & Sons, architects. (A) Rush & Tompkins Ltd., £275,000.

FINSBURY.—Erection of office and workshop at 132/6 St. John-st., EC1. White & Traviss, architects. (A) Rush & Tompkins Ltd., £70,000.

GATESHEAD.—Erection of six houses, six police houses and an office and garage at Beacon Lough for TC. (GD) J. Robson Ltd., Stakeford, Northumberland, £20,680.—Erection of factory for Schweppes Ltd., London. Architects are Tripe & Wakeham, 16 Fitzhardinge-st., London, W1. (A) Gilbert Ash Ltd., 2 Stanhope Gate, London, W1 (work to start in September).

GLOUCESTER.—Rebuilding of premises at 51 Westgate-st. for Cheltenham & Hereford Breweries Ltd. L. W. Barnard & Ptnrs., architects. (A) Ford & Weston Ltd., £12,848.

HACKNEY.—Following for LCC:—Erection of flats and other works at Frampton Park estate extension. (A) Rowley Bros. Ltd., Tottenham, £274,437; repairs and improvements at Upton House county sec. sch. (A) Hammond & Miles Ltd., Ilford, £21,031.

HARLOW.—Erection of 203 dwellings and 69 garages at Gt. Parndon, Harlow. V. Hamnett, architect. (A) Rush & Tompkins Ltd., £350,000.

HUDDERSFIELD.—Block of shops and flats at Swan-la., Lockwood, for BC. (A) Wm. Mallinson & Sons (Lockwood) Ltd.

HUNTINGDON (Hunts).—Erection of dwellings and ancillary works for LCC. (A) Johnson & Bailey Ltd., Cambridge, £429,118.

KENT.—Erection of industrial premises for Allied Suppliers Ltd., Ruxley Corner, Sidcup By-pass, Footscray. Eric Firmin & Ptnrs., architects. (A) Rush & Tompkins Ltd., £73,000.

KENT.—Construction of three large natural draft cooling towers at Richborough Power Station. (A) J. L. Kier & Co. Ltd., in association with Film Cooling Towers (1925) Ltd., £550,000.

KIRKBY.—Erection of 30 shops for urban district shopping centre for Ravenseft Properties Ltd. Kenneth Wakeford, Jerram & Harris, London, W2, architects. P. R. Rose, constg. engr. Cyril Sweett & Ptnrs., quantity surveyors (A) Holland & Hannen and Cubitts (North West) Ltd., £110,000.

LAMBETH.—Additional teaching accommodation at Priory county sec. sch. for LCC. (A) Greenway & Son Ltd., Camberwell, £15,610.

LEEK.—Erection of 66 flats for UDC. (A) Gregory Housing Ltd., Worthing, Sussex.

LIVERPOOL.—Following for TC:—54 houses, eight shops and 12 garages at Furlong-st. (A) Peak Construction (Liverpool) Ltd., £132,969; 64 houses and 26 garages at Higher-la., Long-la. (A) Direct labour, £109,985.—Garage/showrooms/petrol filling station at Red Cross-st. for Lime Street Garages Ltd. (A) The Norwest Construction Co., Ltd., Dunnings Bridge-rd., Liverpool.

LLANDUDNO.—New sch. for physically handicapped children at Craigydon for Joint Com. (A) Edward Jones (Contractors) Ltd., Penmaenmawr.

(GD) LONDON (Admiralty).—Recent contracts of over £4,000 in value.—*Fife.* Modernisation of houses. J. R. & A. Adam Ltd., Lochgelly. *Renfrewshire:* Strengthening of jetty. H. M. Murray & Co. Ltd., Glasgow, C2. *Morayshire:* Construction of building. Alexander Hall & Son (Builders) Ltd., Aberdeen.

(GD) LONDON (Air Ministry).—Contracts to the value of £4,000 or over for the weeks ended July 29 and August 5:—*Building work:* Middleton St. George, Co. Durham. F. Shepherd & Son Ltd., Blue Bridge-la., York; Kinloss, Morayshire. Scottish Tarmacadam Ltd., 44/52 Bilbao-st., Glasgow, C5; Warboys, Hunts. A. J. G. Potter & Sons Ltd., High-st., Stanwick, Wellingborough, Northants; Uxbridge, Middlesex. W. H. Streeter Ltd., Tudor-rd.-wks., Hampton, Middlesex; Andover, Hants. F. R. Hipperson & Son Ltd., Invicta-hse., Wantz-rd., Dagenham, Essex. *Building and civil engineering:* Halton, Bucks. F. R. Hipperson & Son Ltd., Invicta-hse., Wantz-rd., Dagenham, Essex. *Artificers work:* Croydon Airport, Surrey. CAS (Contractors) Ltd., St. James's-hse., Kensington-sq., London, W8; Carpenders Park, Herts. Combined Contractors (London) Ltd., Wellington-wks., Voluntary-pl., London, E11; Eastleigh Airport (Hants), etc. R. Corben & Son Ltd., 26 Carlton-cres., Southampton, Hants.; Henlow, Beds. M. & F. O. Foster & Co. Ltd., 23 York-rd., Hitchin, Herts. *Painting work:* Mount Batten, Plymouth, Devon. George Jones & Son (Contractors) Ltd., 276 Kensington Church-st., London, W8; Bovingdon, Herts & Chenies, Bucks. W. H. Streeter Ltd., 10 Tudor-rd., Hampton, Middlesex; Wellesbourne, Mountford, etc., Warwicks. T. E. Cundy & Son Ltd., 28 Belgrave-rd., Leicester; Stansted, Essex. William Herd & Co. Ltd., 95 Baker-st., London, W1. *Surfacing of paved areas:* Strubby, Lincs. The Limmer & Trinidad Lake Asphalt Co. Ltd., 232-242 Vauxhall Bridge-rd., London, SW1. *Resurfacing work (Runway), etc:* Kinloss, Morayshire. William Briggs & Sons Ltd., PO Box 19, East Camperdown-st., Dundee, Angus. *Epoxy bitumen asphalt surfacing:* Leconfield, Yorks. George Wimpey & Co. Ltd., Hammersmith Grove, London, W6. *Heating installations:* Middleton St. George, Co. Durham. Walter Cowen Ltd., Souldern-rd., London, W14. *Supply and installation of aviation fuel expense pump:* Sculthorpe, Norfolk and Mildenhall, Suffolk. Stothert & Pitt Ltd., Bath, Somerset.

(GD) LONDON (British Railways).—Recent contracts placed by Southern Region:—Resurfacing and surface dressing of roads at London (Western) District; Aubrey Watson Ltd., Henley-on-Thames, Oxon.—New car ferry slipway at Fishbourne, Isle of Wight; John Mowlem & Co. Ltd., London, E14.—Station renovations at Warminster; Maurice Hill Ltd., Horndean, Hants.—Repairs and improvements at Bournemouth Central Station; James Drewitt & Son Ltd., Bournemouth, Hants.—Renovations at Gillingham carriage depot; W. R. Payne & Sons Ltd., Westcliff-on-Sea, Essex.—Renovations at Eastleigh carriage and wagon depot; Caffin & Co. Ltd., London, WC2.—Improvements to staff accommodation at Newhaven Town Station; John W. Ridge Ltd., Brighton, Sussex.—Improved staff accommodation at Exeter Central; Stephens & Son Ltd., Exeter, Devon.—Reconstruction at Folkestone Central Station; John Laing & Son Ltd., London, NW7.—Recladding of repair shop at Slade Green; Maurice Hill Ltd., Horndean, Harts.—Renewal of cladding at Eastleigh locomotive depot; Maurice Hill Ltd., Horndean, Hants.

(GD) LONDON (British Railways).—Recent contracts placed by North Eastern Region:—Concreting of an area outside a timber store at Shildon wagon works; G. Stephenson (Builders & Contractors) Ltd., Bishop Auckland.—Provision of a one-storey prefabricated timber building as an extension to the Ch. Civil Engineer's Bridge Office, York; Stephenson Developments (Huddersfield) Ltd.

(GD) LONDON (British Railways).—Contracts placed by Eastern Region:—Repairs to overbridge No. 124 between Killamarch West and Woodhouse Mill; Thomas Fletcher & Co. Ltd., Forest-rd., Mansfield, Notts.—Construction of workshop and staff amenity building at Colchester diesel depot; Holliday & Greenwood Ltd., 11 Buckingham Palace-gdns., London, SW1.—Reconstruction of Underline Bridge No. 81 over the Great Northern main line between Tuxford Central and Fledborough; W. & C. French Ltd., South Brink, Wisbech, Cambs.—Construction of inspection pits, manufacture, laying and fixing of precast concrete deck slabs, elevated walkways, services, etc., and construction of ducts, apron and roadway at new carriage servicing depot, East Ham; George Wimpey & Co. Ltd., Hammersmith Grove, London, W6.—Provision of earthworks, construction of coal stacking area, road and paths, services, fencing, etc., and strengthening for new track over culverts at Harlow Mill Station; David Chaston Ltd., Essex-rd., Hoddesdon, Herts.—Supply, delivery and erection of electrical installations at Tilbury (Riverside) and East Tilbury Stations; James Scott & Co. (Electrical Engineers) Ltd., 20 Grosvenor-pl., London, SW1.—Station improvements at Billericay, Wickford, Rayleigh, Hockley, Rochford and Prittlewell Stations; Haymills (Contractors) Ltd., 'Empire House,' Hanger Green, Ealing, London, W5.

(GD) LONDON (MoW).—Contracts placed for week ended July 23:—*Essex:* Erection of Post Office, High-st., Ongar; A. & C. Barvis Ltd., Manor-wks., Church-rd., Thundersley, Essex. *Lancashire:* Erection of telephone exchange, White-st., Stockton Heath; Cooper Bros. & John Clayton Ltd., Catherine-st., Macclesfield. *London:* External decorations at 37 Belgrave-sq., SW1; Abbott of Harrow, Sherbourne-hse., Northolt-rd., Harrow, Middx.—Alterations to Wellington Museum, Apsley-hse., Piccadilly, W1; Dove Bros. Ltd., Cloudesley-pl., Islington, N1.—Builders' work, etc., at Whitehall District Heating Scheme, phase 1; Higgs & Hill Ltd., Crown-wks., South Lambeth-rd., SW8.—Improvement scheme at Hyde Park; Dove Bros. Ltd., Cloudesley-pl., Islington, N1.—Alterations at

B·A·T·S·F·O·R·D

Plumbing Materials & Techniques

SYDNEY WEBSTER A.R.I.B.A.

Complementary to the author's PLUMBING IN BUILDING yet entirely self-contained, this new book concentrates on the techniques involved, describing in full the relevant methods and materials. 114 *illustrations* 30s.

Law of Contract & Tort

A. J. POLLAND

A cohesive digest of the basic principles underlying the law of Contract and Tort, written by a barrister-at-law to provide architects, auctioneers, surveyors and estate agents with a working knowledge of the subject.

37*s.* 6*d.*

4 Fitzhardinge Street W.1

the Patent Office, 25 Southampton-bldgs., WC2; Howe & White Ltd., 35 Manor-rd., Wallington, Surrey. *Oxfordshire:* Alterations and extensions to telephone repeater station, Woodstock-rd., Oxford; G. H. Kingerlee & Sons Ltd., 35a Queen-st., Oxford. *Warwickshire:* Extensions and adaptations at Crown-bldg., Harborne-La., Selly Oak, Birmingham; Higgs & Hill Ltd., Stoke Heath Wharf, Swan-la., Coventry. *Worcestershire:* Erection of diesel generator at Ministry of Works engineering depot, Drakelow; W. H. Dorman & Co. Ltd., Tixhall-rd., Stafford.

(GD) LONDON (War Dept.).—Contracts placed for week ended July 22:—*Brecknockshire* (Cwm Gwdi): Rifle range. T. F. Howells Ltd., Caerphilly. *Glamorganshire* (Bridgend): Miscellaneous. Davies & Davies Ltd., Cardiff. *Hampshire* (Farnborough and Cove): Painting and decorating. P. J. Hartel (Southern Ltd.), Southampton. *Hampshire* (Blackdown area): Painting and decorating. Donald Humberstone & Co. Ltd., Louth. *Kent* (Dover): Painting. South London Decorators Ltd., London, SW16. *London* (NW1): Painting and decorating. Decorative Painting Contractors Ltd., Hounslow. *Staffordshire* (Marchington): Painting. T. H. Kenyon & Sons Ltd., London W9. *Warwickshire* (Kineton): Miscellaneous. Lewis & Watters Ltd., Leamington Spa. *Hampshire:* Painting at Hilsea. Architectural Decorators Ltd., London, SW1; Building at Aldershot. Lee Bros (Aldershot) Ltd., Aldershot; Heating and water at Ewshott. G. H. Marshall Ltd., Reading. *Nottinghamshire:* Structural steelwork at Chilwell. Carter-Horseley (Engineers) Ltd., Tipton; Roofing at Chilwell. W. H. Herries Ltd., Nottingham. *Pembrokeshire:* Painting and redecorating at Manorbier and Castlemartin. J. H. Woodward (Contractors) Ltd., Leamington Spa. *Wiltshire:* Painting and decorating at Bulford, Salisbury and Larkhill. P. J. Hartel (Southern) Ltd., Southampton; Electrical heating at Tidworth, Yorkshire (Catterick Camp). Bonar Long & Co. Ltd., Wanson Co. Ltd., Dundee, Boreham Wood.

MANCHESTER.—Following for TC:—Erection of 240 dwellings at Rose Hill, Marple. (A) Henry Boot & Sons (Manchester) Ltd., Altrincham, Ches.; 179 dwellings and laundries at Bradford-rd. re-development area. (A) Direct labour; 28 dwellings at Mills-st., Ancoats, redevelopment area. (A) Direct labour; 351 dwellings at Councillor-la., Cheadle, Ches. (A) Direct labour.—Design and construction of RC framework and foundations for two nine-storey blocks, each containing 73 dwellings, at Glebelands-rd., Ossington Walk. (A) Holst and Co. Ltd. —Taxiway/ run-up area at Manchester Airport. (A) John Laing & Son Ltd., London. —Airfield lighting control building at Manchester Airport. (A) F. Marsland, Stockport, Ches.—New PH at Greenbrow-rd., Wythenshawe, for Taylors Eagle Brewery Ltd. (A) Peter Hodkinson Ltd., Ardwick, Manchester 12.

MIDDLESBROUGH.—Erection of new x-ray dept. and link corridor at Hemlington Hospital for Newcastle Regional Hospital Bd. Architect to Bd. is P. H. Knighton. Thos. Barrett, Sons & Ptnrs., quantity surveyors. (A) Tarslag Ltd., Stockton-on-Tees, £23,946.—Erection of 39 houses at Easterside for CBC. (A) Moore & Cartwright, Norton-on-Tees, £60,198.

MONMOUTHSHIRE.—Erection of Abergavenny multilateral sch. (stage 1) for CC. S. Leysham, architect. (A) Rush & Tompkins Ltd., £180,000.

NORTHALLERTON. — Erection of 22 houses and eight flats at Forest-rd. estate for UDC. (A) R. B. A. Moody Brothers (Contractors) Ltd., Northallerton.

NORTHUMBERLAND. — Erection of prim. sch. at Ovingham for CC. (A) Graham & Son Ltd., Forest Hall, Newcastle-upon-Tyne 12, £28,000.

NORTHUMBERLAND. — Additions to Longhoughton CoE sch. for CC. County A is C. C. Brown. (A) Cawood Wharton & Co. Ltd., Harrowgate, £10,500.—Erection of prim. sch. at Old Hartley for CC. (A) G. L. Currie Ltd., Newcastle-on-Tyne, £22,000.

OLDBURY.—Erection of 210 dwellings in three blocks of flats for BC. (A) G. Wimpey & Co. Ltd., £450,000.

PADDINGTON.—Erection of luxury flats at 18/21 Hyde Park-gdns., W2. Raglan Squire & Ptnrs., architects. (A) Pauling Construction Co. Ltd., £180,000.

PADIHAM.—Erection of 22 bungalows and houses at Adamson-st. site for UDC. (A) Drury Construction Co. Ltd., £33,433.

POPLAR.—Construction of one five-storey block of flats at Woodin-st. areas for LCC. (A) J. M. Hill & Sons Ltd., £82,992.

PRESTON.—Erection of private houses at Highgate Park estate, Fulwood, Preston. Grenfell Baines & Hargreaves, architects. (A) Rush & Tompkins Ltd., £600,000.

ST. MARYLEBONE.—Erection of houses at Hamilton-terr., W1. Raglan Squire & Ptnrs., architects. (A) Pauling Construction Co. Ltd., £40,000.

SHEFFIELD.—Erection of Halifax Hall of Residence for women at Sheffield University for The Senate. (A) M. J. Gleeson (Contractors) Ltd.

SHIPLEY.—Erection of 86 flats and houses and 18 garages at Coach-rd. for UDC. (A) Direct labour, £124,613.

SOUTH CROYDON.—Erection of 30 flats, eight shops and 21 garages on former Archbishop Tenison's sch. site, Selsdon-rd. (A) A. J. Wait & Co. Ltd.

SOUTHWARK.—Erection of stage II of the Elephant and Castle redevelopment scheme, comprising three blocks of multi-storey offices, etc. Erno Goldfinger, architect. Ove Arup & Ptnrs., constg. engrs. Davis, Belfield & Everest, quantity surveyors. (A) Tersons Ltd., London, N3. Est. £1,159,000.

STALYBRIDGE.—Erection of 38 houses for BC. (A) Direct labour, £54,933.

STEPNEY.—Construction of Blocks 1 and 2 and other works at Spring Walk site for LCC. (A) Rush & Tompkins Ltd., Kent, £232,553.

SUNDERLAND.—Erection of 20 bungalows at Grange-rd., Castletown. (A) Direct labour.

SWANSCOMBE (Kent).—Construction of a 400 ft. high rc chimney at works of Associated Portland Cement Manufacturers Ltd. Oscar Faber & Ptnrs., constg. engrs. (A) The Mitchell Construction Co. Ltd., Peterborough, £45,000.

SWANSEA.—Following for BC:—Erection of 230 flats at Dyfatty site. (A) Gibson & King Ltd., Milford Haven, £828,284; erection of 190 houses at Sketty Park estate. (A) Direct labour, £320,985; erection of 166 houses at Claxe, Part 2 scheme. (A) Gibson & King Ltd., £269,100.

TYNEMOUTH.—Extensions to the Coast-rd., North Shields, for TC. (A) Messrs. J. W. Hall, Morpeth, Northumberland, £174,500.

WESTMINSTER.—Erection of 12 luxury flats at Eaton-sq. Raglan Squire & Ptnrs., architects. (A) Pauling Construction Co. Ltd., £150,000.

WHICKHAM (Co. Durham).—Proposed redevelopment scheme in the Athol-st. area of Dunston, including the erection of 14 semi-detached houses, 13 ground floor aged persons' flats, 38 first and second floor two-bedroom maisonettes, 32 lock-up garages and the construction of roads, sewers, etc., for UDC. Architects are Fennell & Baddiley, Bridge End-chbrs., Chester-le-Street. (GD) William Leach Ltd., St. James-st., Newcastle-on-Tyne.

WOOLWICH.—Following for LCC:—Construction of new roads and sewers at Alton-st. site. (A) Fitzpatrick & Son (Contractors) Ltd., Poplar, £26,325; design, supply, delivery and erection of structural floors and rc works to Block A and B, Perrott-st. site. (A) Frazzi Ltd., Westminster, £12,777.

WORKINGTON.—Erection of community centre for the Coal Industry Social Welfare Organisation. (A) John Laing & Sons, Dalston-rd., Carlisle.

YORKS. — Reconstruction of colliery buildings and installations at Shirebrook Colliery for NCB. (A) J. L. Kier & Co. Ltd., £252,000.

FEDERATION OF MASTER BUILDERS

UNITE FOR STRENGTH

THE FEDERATION OF MASTER BUILDERS

The Largest Individually Representative Organisation in the Kingdom

Membership Over 12,000

Regional Offices in BIRKDALE
BIRMINGHAM, BRISTOL, CAMBRIDGE
CARDIFF, EDINBURGH, LEEDS, LONDON
NEWCASTLE AND SEVENOAKS
OVER 130 BRANCHES

SUBSCRIPTION £6.6.0. p.a.

Service to members includes free monthly issues of the
Federation Journal

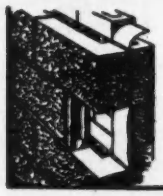
THE FEDERATION OF MASTER BUILDERS
33 John Street, Holborn, London, W.C.1
Tel.: CHANCERY 7583 (6 lines).

Please send particulars of the advantages of membership to

Kindly cut along dotted lines

12-8-60

BROAD-ACHESON REVEAL BLOCKS



Complete the Job of Cavity Construction

BROAD & CO. LTD.
PADDINGTON, W.9

THE ESSEX STEEL SCAFFOLDING Co LTD

SALES, HIRE
ERECTION
CRADLES

SMARTS LANE
LOUGHTON ESSEX
TEL: LOUGHTON 5022

OFFICIAL ANNOUNCEMENTS

Rate : 30/- per inch, minimum ½-inch ; each additional line 2/- **Competitions Contracts Public Appointments**

ATTENTION ADVERTISERS

Classified advertisements in this section can be accepted up to 12 o'clock noon on the TUESDAY prior to issue. It is regretted that advertisements cannot be accepted by telephone.

CONTRACTS

DEPTFORD
METROPOLITAN BOROUGH.

TENDERS are invited from established painting contractors for the EXECUTION OF INTERNAL REDECORATION WORKS TO POST-WAR PROPERTIES.

Specifications, Conditions of Contract and full particulars may be obtained from the Borough Engineer and Surveyor, Deptford Town Hall, New Cross, S.E.14.

Tenders, when completed, must be returned to the undersigned in the envelope provided, not later than 4 p.m. on WEDNESDAY, 31st AUGUST, 1960.

The Council reserves the right to allocate sections of work to two or more contractors, who must be prepared to carry out the work at the prices Tendered.

ERNEST FIELD,
Town Clerk.

Deptford Town Hall,
New Cross,
S.E.14.

STOCKTON-ON-TEES
BOROUGH.

COMMITTEE FOR EDUCATION.
HARDWICK INFANTS' SCHOOL.

TENDERS are to be invited for the following :—

(a) The SUPPLY, DELIVERY AND FIXING OF METAL WINDOWS.
(b) The DESIGN AND INSTALLATION OF CENTRAL HEATING AND DOMESTIC HOT WATER SERVICE.
(c) The INSTALLATION OF ELECTRIC LIGHTING AND POWER SERVICE.
(d) THE SUPPLY, DELIVERY AND FIXING OF WOOD BLOCK, THERMOPLASTIC AND CORK TILE FINISHES.
(e) The PREPARATION OF PLAYING FIELDS INCLUDING SEEDING AND PLANTING.
(f) The SUPPLY AND DELIVERY OF VENETIAN BLINDS.
(g) The SUPPLY AND DELIVERY OF ROLLER SHUTTERS.
(h) The SUPPLY AND DELIVERY OF W.C. PARTITIONS.
(i) DESIGN AND ERECTION OF FRAMED TIMBER ROOFS.

Firms wishing to Tender for any of the above items should submit their names and details of work carried out to the Borough Architect, 28 The Square, Stockton-on-Tees, not later than MONDAY, the 22nd AUGUST, 1960.

JOHN B. HAWORTH,
Town Clerk.

BOURNEMOUTH
COUNTY BOROUGH.

TO BUILDING CONTRACTORS.

TENDERS are invited on a FIXED PRICE BASIS for the ERECTION OF SPORTS PAVILION in Meyrick Park.

Bills of Quantities and Tender form obtainable from, and conditions of contract and drawings inspected at Borough Architect's Office, Room 106, Town Hall, Bournemouth, on payment of a two guineas deposit, to be refunded on receipt of a bona fide Tender not subsequently withdrawn and return of all documents.

Tenders to be received by me not later than 10 a.m. 13th SEPTEMBER, 1960.

TO SPECIALIST SUB-CONTRACTORS.

TENDERS are invited for SPECIALIST SUB-CONTRACT WORK AT NEW SPORTS PAVILION, Meyrick Park, as follows :—

(a) CENTRAL HEATING INSTALLATION ;
(b) STONEWORK.

Firms wishing to tender for these sub-contracts should make application to the Borough Architect, Room 106, Town Hall, Bournemouth, not later than 20th AUGUST, 1960.

A. LINDSAY CLEGG,
Town Clerk.

GREENWICH
METROPOLITAN BOROUGH.

NEW BRANCH LIBRARY,
BROOK-LANE, KIDBROOKE, S.E.3.

Applications are invited from those willing to TENDER for the ERECTION OF A NEW BRANCH LIBRARY at Brook-lane, Kidbrooke, S.E.3.

Plans may be inspected and other particulars obtained at the office of the Borough Engineer and Surveyor at the Town Hall, Greenwich High-road, S.E.10.

Selected applicants will be informed by post and will be supplied with Bills of Quantities and other documents required to enable them to Tender.

Tenderers will be required to sign, or to refuse to sign a certificate declaring that they are not parties to any scheme or arrangements with other Tenderers in respect of the amount of or the adjustment of their Tender. The full wording of the certificate may be obtained from the undersigned.

Application must reach the Borough Engineer and Surveyor at the Town Hall by NOON on 30th AUGUST, 1960, and must include details of similar work undertaken recently.

G. C. TURK,
Town Clerk.

Town Hall,
Greenwich, S.E.10.
July, 1960.

CRAYFORD
URBAN DISTRICT COUNCIL.

REPLACEMENT OF BATHS, SINKS, WINDOWS, AND INSTALLATION OF LAVATORY BASINS, IN 970 PRE-WAR HOUSES IN CRAYFORD.

The Council propose to invite FIRM PRICE TENDERS from selected Contractors for the REPLACEMENT OF BATHS, SINKS, KITCHEN AND BATHROOM WINDOWS, and the INSTALLATION OF LAVATORY BASINS IN 970 PRE-WAR DWELLINGS. Tender documents will be sent the end of SEPTEMBER for return WITHIN 28 DAYS.

This work is required to be carried out in the shortest possible time and Contractors should give full information concerning details of previous works, total number of tradesmen who would be employed, etc., and the estimated time required to complete the contract.

Application for inclusion on the selected list should be received by the Engineer and Surveyor, Town Hall, Crayford, Kent, by 12 NOON, 31st AUGUST, 1960.

The Council do not bind themselves to include any applicants on the selected list.

G. B. HODGSON,
Clerk of the Council.

Town Hall,
Crayford,
Kent.

HESTON AND ISLEWORTH
BOROUGH.

PUBLIC CONVENIENCE,
BROADWAY, HOUNSLOW.

TENDERS are invited for the ERECTION OF A PUBLIC CONVENIENCE. Firms wishing to tender should apply to the Borough Engineer and Surveyor, 86 Lampton-road, Hounslow. Tender documents will be forwarded on or about 18th AUGUST, 1960. Tenders must be delivered to me in the envelope provided by 10 a.m. on 10th SEPTEMBER, 1960.

D. MATHESON,
Town Clerk.

Town Hall,
Hounslow,
Middlesex.

SHREWSBURY
BOROUGH.

MUSIC HALL ALTERATIONS.

Firm price TENDERS are invited from building contractors for ALTERATIONS AT THE MUSIC HALL, comprising new kitchen and catering equipment, installation of passenger/goods lift, and addition of Mayor's retiring room.

Bills of Quantities, Specification and Tender documents may be obtained upon application to the Borough Surveyor, Guildhall, Shrewsbury, upon payment of a deposit of three guineas (by cheque, payable to Shrewsbury Corporation) which will be refunded upon receipt of a bona fide Tender not subsequently withdrawn. Drawings may be inspected at the office of the Architect, Graham F. Goatley, Esq., A.R.I.B.A., Foresters' Hall, Wyle Cop, Shrewsbury, during normal office hours.

It is anticipated that the work will be started during September and contractors Tendering must be in a position to fulfil this requirement.

Tenders, in the envelope provided endorsed "Music Hall Alterations," must be received by the undersigned not later than FIRST POST on WEDNESDAY, 31st AUGUST, 1960.

S. R. H. LOXTON,
Town Clerk.

Guildhall,
Shrewsbury.

WEST SUSSEX
COUNTY COUNCIL.

Contractors wishing to submit a FIXED PRICE TENDER for the undermentioned project, are invited to apply for permission to tender; such applications to be addressed to the County Architect, County Hall, Chichester, to reach him not later than 22nd AUGUST, 1960.

TWO CLASSROOM INSTALMENT OF NEW SCHOOL AT FERNHURST, NR. HASLEMERE.
(Job No. 6534.)

Quantities will be issued on or about 1st OCTOBER, 1960.

The County Council does not bind itself to accept the lowest or any Tender, and the firm whose Tender is accepted must be prepared to enter into a contract in a form to be prepared by me.

T. C. HAYWARD,
Clerk of the County Council.

County Hall,
Chichester.

HOVE
BOROUGH.

TENDERS are invited for the ERECTION OF TWENTY-SIX HOUSES AND THIRTY-SIX FLATS in Chichester-close.

Applications to tender must be received by the Borough Engineer and Surveyor by 10 a.m. on MONDAY, 5th SEPTEMBER, 1960. From such applications a selected list of tenderers will be made to whom Bills of Quantities and Forms of Tender will be sent on or about 19th SEPTEMBER, 1960. Drawings and Form of Contract may be seen at the Borough Engineer and Surveyor's Office.

Applications to tender must be accompanied by a deposit of three guineas which will be refunded to those not invited to tender or on receipt of a bona fide tender, as the case may be. The Council does not bind itself to accept the lowest or any tender.

Tenders, on Form supplied, addressed to the undersigned in a sealed envelope endorsed "Tender for Houses and Flats, Chichester-close," must be delivered not later than 10 a.m. on TUESDAY, 18th OCTOBER, 1960.

JOHN E. STEVENS,
Town Clerk.

Town Hall,
Hove, 3.

DOVER
BOROUGH.

AMENDED ADVERTISEMENT.
20 HOUSING UNITS—ST. DAVID'S-AVENUE, AYCLIFFE.

Fixed price TENDERS are invited for the ERECTION OF 20 HOUSING UNITS, TOGETHER WITH ALL SITE AND ANCILLARY WORKS, on the north side of St. David's-avenue, Aycliffe, Dover.

Bills of quantities, specification and forms of Tender may be obtained from the Borough Engineer, Brook House, Dover, on payment of a deposit of £2 2s. 0d., returnable on receipt of a bona fide Tender not subsequently withdrawn.

Tenders and priced bills of quantities in envelopes provided should reach the undersigned not later than the 9th SEPTEMBER, 1960.

JAMES A. JOHNSON,
Town Clerk.

New Bridge House,
Dover.
29th July, 1960.

CARDIFF CITY.

CITY ARCHITECT'S DEPARTMENT.
COUNCIL CHAMBER, ALTERATIONS AND ADDITIONS.

FIXED PRICE TENDERS are invited for the ALTERATION AND ADDITIONS TO THE SEATING ACCOMMODATION in the Council Chamber, City Hall, Cardiff.

Conditions of Contract, Drawings and Specification may be inspected at the City Architect's Department, Municipal Offices, Greyfriars-road, Cardiff.

Specification, Drawings and Form of Tender may be obtained from the City Architect, to whom application should be made, accompanied by a deposit of £2 2s. 0d. Cheques should be made payable to the Cardiff Corporation and crossed "Not negotiable and Co." The deposit will be refunded on receipt of a bona fide Tender or the return of the contract documents.

Tenders will not be considered unless enclosed in the envelope provided and endorsed "Tender for Council Chamber, Alterations and Additions," addressed to the Town Clerk at the City Hall, Cardiff, and sent by Registered Post so as to be received not later than the 6th SEPTEMBER, 1960.

The envelope must not bear the name of or any mark indicating the identity of the Tenderer.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff.
July, 1960.

SWANSEA
COUNTY BOROUGH.

TO BUILDERS.

TENDERS are invited for the PROPOSED ERECTION OF A SPORTS PAVILION at King George V Playing Fields, Swansea.

Drawings of the Works and General Conditions of Contract may be inspected at the office of the Borough Architect, The Guildhall, Swansea. Builders desiring to tender must deposit the sum of Five Pounds with the Borough Architect on or before THURSDAY, 18th AUGUST, 1960. Bills of Quantities will only be issued to those builders who make the said deposit. The deposit will be refunded after delivery of a bona fide Tender (not subsequently withdrawn) and the return of all documents.

Tenders must be delivered to me on or before the date stated in the Form of Tender and in accordance with the directions issued.

No guarantee is given that the lowest or any other Tender will be accepted.

IORWERTH J. WATKINS,
Town Clerk.

The Guildhall,
Swansea.
22nd July, 1960.

MITCHAM
BOROUGH.

PHIPPS BRIDGE REDEVELOPMENT SCHEME.
CONTRACT NO. 4.
STAGE I—HOUSING.

TENDERS are invited for the CONSTRUCTION OF :—

21 HOUSES
8 FLATS IN TWO-STOREY CONSTRUCTION
24 FLATS IN FOUR-STOREY CONSTRUCTION
31 FLATS IN FIVE-STOREY CONSTRUCTION
73 FLATS IN ELEVEN-STOREY CONSTRUCTION.

Contractors wishing to tender upon Bills of Quantities should submit their names not later than 12 NOON on SATURDAY, 20th AUGUST, 1960, to the Borough Engineer and Surveyor, Town Hall, Mitcham, at whose office the drawings and General Conditions of Contract may be inspected during normal office hours.

Tenders must be delivered to the undersigned, in the envelope provided, not later than FIRST POST on WEDNESDAY, 5th OCTOBER, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

R. H. WHITE,
Town Clerk.

Town Hall,
Mitcham.
20th July, 1960.

THURROCK
URBAN DISTRICT COUNCIL.

PROPOSED COVERED SWIMMING POOL AND PUBLIC HALL.

The Council anticipate inviting TENDERS for the ABOVE IMPORTANT SCHEME in the near future.

Contractor with experience of major works of a similar character, wishing to be considered for inclusion in the list of those invited to submit Tenders, should forward their names to Mr. C. S. H. Hawkes, M.I.C.E., M.I.Mun.E., Engineer and Surveyor, Council Offices, Palmer's-avenue, Grays, Essex, to reach him not later than first post, MONDAY, 29th AUGUST, 1960.

A list of works carried out by the applicant, comparable to the project under consideration, should accompany the application.

Drawings may be inspected at the above address during normal office hours.

The Council will select from interested firms those whom they will ask to tender and they reserve the right to accept the lowest or any Tender submitted.

A. E. POOLE,
Clerk of the Council.

Council Offices,
Whitehall-lane,
Grays,
Essex.
28th July, 1960.

YORK CITY

FIXED-PRICE TENDERS are invited for the ERECTION OF A BLOCK OF 13 FLATS at Albert-street, Walmgate, York.

Bills of Quantities and Forms of Tender may be obtained from the undersigned on payment of a deposit of £3 (cheques to be made payable to York Corporation). Drawings may be inspected at the address shown below to where completed Forms of Tender are to be delivered not later than first post on 9th SEPTEMBER, 1960.

E. FIRTH, F.R.I.B.A., A.M.T.P.I.,
City Architect.

8 St. Leonard's-place,
York.
August, 1960.

EAST BARNET
URBAN DISTRICT COUNCIL.

CONSTRUCTION OF A BLOCK OF 18 DWELLINGS FOR ELDERLY PEOPLE. CONTRACT NO. 930.

FIXED PRICE TENDERS are invited for the ERECTION OF A TWO-STOREY BLOCK OF 18 SINGLE-ROOM DWELLINGS, WARDEN'S FLAT AND INCIDENTAL WORKS at Bulwer-road, New Barnet.

Forms of Tender, Bills of Quantities, etc., may be obtained from the Engineer and Surveyor, Town Hall, Station-road, New Barnet, Herts., on payment of a deposit of Two Guineas, which will be refunded on receipt of a bona fide Tender. Drawings are available for inspection at the Town Hall.

Tenders, sealed in the envelopes provided, must be received by not later than FRIDAY, the 9th SEPTEMBER, 1960.

The lowest or any Tender will not necessarily be accepted.

ROSS-ON-WYE
URBAN DISTRICT COUNCIL.

FIXED PRICE TENDERS are invited for the ERECTION OF A BLOCK OF FOUR FLATS (TWO STOREY) TOGETHER WITH DRAINS, PATHS, AND ALL ANCILLARY WORKS, at Brampton-avenue, Berryfield Estate, Ross-on-Wye.

Applications for Bills of Quantities and Form of Tender, accompanied by a deposit cheque for £2 2s. payable to Ross-on-Wye Urban District Council, must be made not later than 16th AUGUST, 1960, to Edgar F. Young, A.R.I.C.S., Chartered Quantity Surveyor, 4 Imperial-square, Cheltenham. The deposit will be returned on receipt of a bona fide Tender.

Bills of Quantities, Form of Tender, and envelope for the return of Tender will be issued on 27th AUGUST, 1960, and Tenders, enclosed in the envelope provided for the purpose, must be delivered to the undersigned not later than 12 NOON on SATURDAY, 17th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any Tender.

E. MOSES,
Clerk of the Council.

Council Chambers,
Ross-on-Wye,
Herefordshire.

STAINES
URBAN DISTRICT COUNCIL.

TOWN-LANE, STANWELL, MIDDLESEX.
ERECTION OF 36 DWELLINGS AND 44 GARAGES—SECTIONS D, E, F & G.

FIXED PRICE TENDERS are invited for the ERECTION OF 2 THREE-STOREY BLOCKS, EACH CONTAINING THREE FLATS AND SIX MAISONETTES, 4 PAIRS OF OLD PEOPLE'S BUNGALOWS, A TERRACE OF TEN HOUSES AND 44 GARAGES.

Bills of Quantities, Specification and Forms of Tender will be available from the 26th AUGUST and will be forwarded to the Applicants on receipt of a deposit of £2 2s. returnable upon the submission of a bona fide Tender not subsequently withdrawn and the return of all documents.

Tenders are to be returned in plain sealed envelopes endorsed "Tender—D, E, F & G, Town-lane," to the undersigned not later than 5 p.m. on FRIDAY, the 16th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any Tender.

F. ENTWISTLE,
Clerk of the Council.

MIDDLESBROUGH
COUNTY BOROUGH.

PROPOSED ERECTION OF CHILDREN'S HOME, CROFT-AVENUE, MIDDLESBROUGH.

TENDERS are invited for the ERECTION OF A CHILDREN'S HOME in Croft-avenue, Middlesbrough.

Contract period nine months.

Bills of Quantities from the Borough Engineer—deposit two guineas.

Tenders to be received by the Town Clerk on or before TUESDAY, 13th SEPTEMBER, 1960.

GATESHEAD
COUNTY BOROUGH.

GREENWELL COUNTY SECONDARY SCHOOL FOR GIRLS, 4 F.E.

Contractors wishing to TENDER for the ERECTION of the above new school are invited to submit their names together with details of work recently carried out and a deposit cheque for Five pounds (payable to the Borough Treasurer) which will be returnable on receipt of a "bona fide" tender.

The school is in traditional construction with R.C. frame foundations and floors, brickwork gables, curtain walling and timber cladding.

Bills of Quantities will be ready in mid-August and a tendering period of approximately five weeks will be allowed.

Application, details and deposits should be forwarded to the Borough Surveyor, Swinburne-street, Gateshead, not later than THURSDAY, 18th AUGUST, 1960.

C. D. JACKSON,
Town Clerk.

Town Hall,
Gateshead, 8.
KL.MH.
2.8.60.

ESSEX
COUNTY COUNCIL.

(1) Civil Defence Head Quarters, Danbury Park, Nr. Chelmsford. PROVISION OF OIL FIRED CENTRAL HEATING.
(2) South West Essex Technical College. PROVISION OF CAR PARKS.
(3) HOSTEL FOR ELDERLY PERSONS, Shernhall-street, Walthamstow.
(4) Great Bardfield County Primary School. KITCHEN.
(5) Shelley County Junior School.
(6) Grays County Technical School—INTERNAL DECORATIONS (2nd advertisement).

Contractors wishing to submit FIRM PRICE TENDERS for the above should forward their names, from which panels will be chosen and provided with Tender documents.

(1) Estimated cost £5,800.
(2) TARPAVING AND DRAINAGE WORKS, estimated cost £2,250.
(3) A three-storey building in traditional construction, estimated cost £65,000. Bills of Quantities are expected to be available mid-October, 1960.
(4) In traditional construction, estimated cost £4,500.
(5) The contract will comprise the CONSTRUCTION OF FOUNDATIONS, PLUMBING, DRAINAGE, FINISHINGS, EXTERNAL WORKS, etc. The buildings will be of prefabricated timber construction and will be supplied and erected by a Sub-Contractor, already nominated within the contract. The value of the whole contract is £37,000.
(6) Estimated cost £2,300.

Separate applications for each contract to reach the undersigned not later than 20th AUGUST, 1960.

H. CONOLLY,
C.B.E., F.R.I.B.A.,
County Architect.

County Hall,
Chelmsford.

WANSTEAD & WOODFORD
BOROUGH.

CONCRETE PALISADE FENCING.

TENDERS are invited for the SUPPLY AND ERECTION of approximately 180 yards 2 ft. 9 in. high exposed aggregate CONCRETE PALISADE FENCING to perimeter of Christchurch Recreation Ground, Wanstead. This section forms part of four-year programme. Tender documents may be obtained from the Borough Engineer, Municipal Offices, E.18, upon payment of £2 deposit, returnable on receipt of bona fide Tender by NOON on 26th AUGUST, 1960.

LINCOLNSHIRE
HOLLAND COUNTY COUNCIL.

BOSTON COLLEGE OF FURTHER EDUCATION.

TENDERS are invited from Building or Civil Engineering Contractors for the DIVERSION OF AN EXISTING MAIN SEWER, involving approximately 630 ft. run of new 48 in. diameter sewer (work to be done during September and October); new access road, temporary and permanent fencing, part stripping of the site and attendance on a piling sub-contractor.

Form of tender, bills of quantities and drawings may be obtained from the County Architect, County Hall, Boston, Lincs., and tenders must be submitted to the undersigned by 10 a.m. on 12th SEPTEMBER, 1960.

H. A. H. WALTER,
Clerk of the County Council.

County Hall,
Boston,
Lincs.

BIRMINGHAM CITY
TO BUILDING CONTRACTORS.

CONTRACT 718.
8 FOUR-STOREY DWELLINGS AND 1 SHOP,
POOL FARM ESTATE,
KINGS NORTON.
CONTRACT 733.
12 THREE-STOREY DWELLINGS,
BUNBURY-ROAD ESTATE,
NORTHFIELD.

The House Building Committee invite FIRM-PRICE TENDERS for the ERECTION of the above.

Bills of Quantities and Forms of Tender will be forwarded on payment of £2 2s. for each contract at the office of A. G. Sheppard Fidler, City Architect, Civic Centre, Birmingham, 1, to whom all cheques should be made payable. Applications should be made by 16th AUGUST, 1960. Conditions of Contract (which include the usual Fair Wages and Conditions of Labour Clause) may be seen at the City Architect's Office during normal working hours.

The deposits will be returned on receipt of bona fide tenders or on notification of inability to tender, together with the return of the documents not later than three days before the date for receipt of tenders.

Tenders, enclosed in the envelope provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. B.31), Council House, Birmingham, 1, NOT LATER THAN 12 noon on FRIDAY, the 16th SEPTEMBER, 1960. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any tender.

T. H. PARKINSON,
Town Clerk.

The Council House,
Birmingham, 1.

STEPNEY
M.B.C.

MARTINEAU-STREET HOUSING SCHEME, STAGE I (75 DWELLINGS AND TWO SHOPS).

TENDERS are invited for:
(1) THERMOPLASTIC TILE FLOORING (3,250 yards super);
(2) FROSTPROOF WALL TILING (380 yards super); and
(3) ASPHALT ROOFING (1,170 yards super); ASPHALT PAVING (580 yards super); and TARMACADAM PAVING (260 yards super);
the areas indicated being approximate.

Forms of tender, with conditions, etc., obtainable from the Architects, Messrs. Howes & Jackman, at 1 Verulam Buildings, Gray's Inn, W.C.1, to whom application should be made not later than 22nd AUGUST, 1960.

Closing date for TENDERS—12th SEPTEMBER, 1960.

WILFRED REEVE,
Town Clerk.

HUNTINGDONSHIRE
FIRE BRIGADE AND CIVIL DEFENCE COMMITTEES.

PROPOSED THREE-BAY FIRE STATION, RAMSEY.

Contractors desirous of submitting a FIXED-PRICE TENDER for the above project are invited to submit their names to S. M. Holloway, A.R.I.B.A., County Architect, County Buildings, Huntingdon, by not later than 12 noon on MONDAY, 29th AUGUST, 1960. From the names submitted a panel of contractors will be selected to whom tender documents will be sent. The closing date for receipt of tenders will be notified later, but it is thought this will be towards the end of NOVEMBER.

The building will be a single-storey reinforced concrete framed structure on piles with infill panel construction of brickwork built from ground beams. The concrete frame and piled foundation will be nominated sub-contracts.

A. C. AYLWARD,
Clerk of the County Council.

County Buildings,
Huntingdon.
11th August, 1960.

BATH CITY.

SNOW-HILL REDEVELOPMENT DEMOLITION OF 53 PROPERTIES AND THE ERECTION OF 94 DWELLINGS, 35 GARAGES AND A LAUNDRY.

Contractors desirous of TENDERING for the above works should submit their names to the Architects, Messrs. Snailum & Le Fevre, 18 Brock-street, Bath, by the 20th AUGUST, 1960, together with a deposit of two guineas payable to the Bath Corporation, which will be returnable on receipt of a bona fide Tender.

Bills of Quantities, Form of Tender and instructions regarding the delivery of Tenders will be forwarded as soon as possible after the above date. Drawings may be seen by appointment at the Architects' offices.

The Corporation does not bind itself to accept the lowest or any Tender.

JARED E. DIXON,
Town Clerk.

Guildhall,
Bath.

SOUTH SHIELDS
DISTRICT HOSPITAL MANAGEMENT COMMITTEE.

INGHAM INFIRMARY, SOUTH SHIELDS.

The Management Committee proposes to ERECT A NEW X-RAY DEPARTMENT adjacent to and linked with the main Hospital Corridor.

The total floor area of this single-storey building will be approximately 5,700 square feet.

Tender documents will be ready for issue to Contractors during AUGUST, 1960, with a view to building operations commencing in the early Autumn.

The project has been planned and will be carried out under the direction of Messrs. S. W. Milburn & Partners, Chartered Architects, of 9 The Esplanade, Sunderland, in conjunction with the Architect to the Newcastle Regional Hospital Board.

Contractors wishing to TENDER for this work are asked to submit their names to the Group Secretary, Ingham Infirmary, South Shields, not later than the 20th AUGUST, 1960. A limited number of Contractors may be selected and asked to tender, but the lowest or any Tender will not necessarily be accepted.

R. HOOD COULTHARD, JR.,
Group Secretary.

SOUTHWICK
URBAN DISTRICT COUNCIL.

SOUTHWICK TOWN CENTRE.

Building contractors who wish to be considered for invitation to submit a fixed price TENDER for the ERECTION OF 32 SHOPS, 32 FLATS AND MAISONETTES OVER AND 32 GARAGES IN FOUR THREE-STOREY BLOCKS are asked to register their names with me by not later than 12 NOON on 19th AUGUST, 1960.

Plans of the proposed shops, etc., may be seen on application at this office during normal business hours.

A. R. SHOTT,
Clerk of the Council.

Town Hall,
Southwick,
Sussex.
15th July, 1960.

HEREFORDSHIRE
COUNTY COUNCIL.

Contractors are invited to TENDER for the formation of PLAYING FIELDS at the County Secondary School under construction at Kington. The work includes grading, preparation, seeding, jumping pits, non-turf wickets, etc.

Applicants who have not previously tendered for similar work for the Authority, should enclose a short list of playing fields contracts carried out (with contract figures) and the names of two or three Authorities or persons to whom reference may be made.

Applications to County Architect, Bath-street, Hereford, by 22nd AUGUST, 1960.

EAST SUSSEX
COUNTY COUNCIL.

HAILSHAM CIVIL DEFENCE TRAINING CENTRE.

TENDERS are invited for ALTERATIONS, ADAPTATIONS AND REPAIRS TO A DRILL HALL to form a new Civil Defence Training Centre at Hailsham.

Contractors wishing to tender should apply before 26th AUGUST, 1960, to the County Architect, County Hall, Lewes, Sussex.

Selected Contractors will be provided with specification on 3rd SEPTEMBER, 1960.

FARNHAM
URBAN DISTRICT COUNCIL.

CONSTRUCTION OF TWO PAIRS OF TWO-BEDROOMED HOUSES AT PINE VIEW-CLOSE, RADSHOT LEA, FARNHAM.

FIXED PRICE TENDERS are invited for the CONSTRUCTION of the above-mentioned dwellings. Forms of Tender, Specification and Bills of Quantities may be obtained and the Conditions of Contract and Drawings inspected at the office of the Council's Architects, Messrs. Gilbert & Hobson, A.R.I.B.A., 69a Castle-street, Farnham, Surrey, upon payment of a deposit of £2 which will be returned upon receipt of a bona fide Tender (not subsequently withdrawn) or upon the return of the documents.

Tenders must be delivered to the undersigned in a plain sealed envelope endorsed "Tender for houses at Pine View-close" not later than noon on the 16th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any tender.

H. W. UNDERDOWN,
Clerk of the Council.

Council Offices,
South-street,
Farnham,
Surrey.

FARNHAM
URBAN DISTRICT COUNCIL.

CONSTRUCTION OF 12 FLATS IN TWO BLOCKS AND TWO PAIRS OF SEMI-DETACHED BUNGALOWS, AT LOWER SOUTH VIEW AND BEAR-LANE, FARNHAM.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION of the above-mentioned dwellings. Form of tender, Specification and Bills of Quantities may be obtained and the Conditions of Contract and Drawings inspected at the office of the Council's Architects, Messrs. A. J. and L. R. Stedman, F./A.R.I.B.A., 36 South-street, Farnham, Surrey, upon payment of a deposit of £2 which will be returned upon receipt of a bona fide tender (not subsequently withdrawn) or upon the return of the documents.

Tenders must be delivered to the undersigned in a plain sealed envelope endorsed "Tender for Dwellings at Lower South View and Bear-lane" not later than noon on the 16th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any tender.

H. W. UNDERDOWN,
Clerk of the Council.

Council Offices,
South-street,
Farnham,
Surrey.

WATFORD
RURAL DISTRICT COUNCIL.

PROPOSED SOCIAL CENTRE, SOUTH OXHEY.

The Council invite TENDERS for the ERECTION OF A SOCIAL CENTRE on a site at Oxhey Place, South Oxhey, in accordance with plans which may be inspected at the Council Offices.

Contractors should apply by the 29th AUGUST, 1960, for the supply of copies of the Bills of Quantities and form of tender, which will be issued after that date. Applications must be accompanied by a deposit of two guineas (£2 2s.) which will be repayable after the submission of a bona fide tender and the return of all documents supplied.

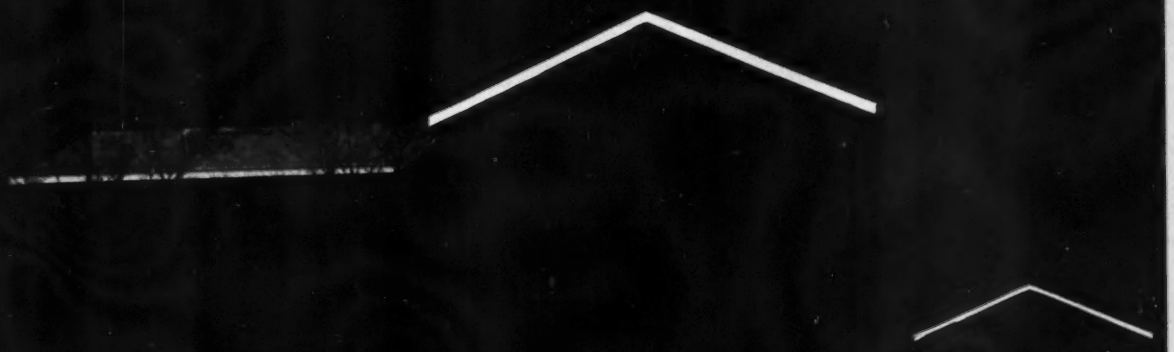
Directions for the submission of tenders will be issued to applicant Contractors with copies of the tender documents.

The Council do not bind themselves to accept the lowest or any tender and security will be required for the due performance of the Contract.

S. A. NICHOLSON,
Clerk to the Council.

Council Offices,
Wynyard House,
99 Langley-road,
Watford,
Herts.

The pitch of this roof is 22½°...



Tiled
with
MARLEY yeoman roof tiles

MARLEY

EAST BARNET
URBAN DISTRICT COUNCIL.

CONSTRUCTION OF A BLOCK OF 18 DWELLINGS FOR ELDERLY PEOPLE. CONTRACT NO. 930.

FIXED PRICE TENDERS are invited for the ERECTION OF A TWO-STOREY BLOCK OF 18 SINGLE-ROOM DWELLINGS, WARDEN'S FLAT AND INCIDENTAL WORKS at Bulwer-road, New Barnet.

Forms of Tender, Bills of Quantities, etc., may be obtained from the Engineer and Surveyor, Town Hall, Station-road, New Barnet, Herts., on payment of a deposit of Two Guineas, which will be refunded on receipt of a bona fide Tender. Drawings are available for inspection at the Town Hall.

Tenders, sealed in the envelopes provided, must be received by not later than FRIDAY, the 9th SEPTEMBER, 1960.

The lowest or any Tender will not necessarily be accepted.

ROSS-ON-WYE
URBAN DISTRICT COUNCIL.

FIXED PRICE TENDERS are invited for the ERECTION OF A BLOCK OF FOUR FLATS (TWO STOREY) TOGETHER WITH DRAINS, PATHS, AND ALL ANCILLARY WORKS, at Brampton-avenue, Berryfield Estate, Ross-on-Wye.

Applications for Bills of Quantities and Form of Tender, accompanied by a deposit cheque for £2 2s. payable to Ross-on-Wye Urban District Council, must be made not later than 16th AUGUST, 1960, to Edgar F. Young, A.R.I.C.S., Chartered Quantity Surveyor, 4 Imperial-square, Cheltenham. The deposit will be returned on receipt of a bona fide Tender.

Bills of Quantities, Form of Tender, and envelope for the return of Tender will be issued on 27th AUGUST, 1960, and Tenders, enclosed in the envelope provided for the purpose, must be delivered to the undersigned not later than 12 NOON on SATURDAY, 17th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any Tender.

E. MOSES,
Clerk of the Council.

Council Chambers,
Ross-on-Wye,
Herefordshire.

STAINES
URBAN DISTRICT COUNCIL.

TOWN-LANE, STANWELL, MIDDLESEX.
ERECTION OF 36 DWELLINGS AND 44 GARAGES—SECTIONS D, E, F & G.

FIXED PRICE TENDERS are invited for the ERECTION OF 2 THREE-STOREY BLOCKS, EACH CONTAINING THREE FLATS AND SIX MAISONETTES, 4 PAIRS OF OLD PEOPLE'S BUNGALOWS, A TERRACE OF TEN HOUSES AND 44 GARAGES.

Bills of Quantities, Specification and Forms of Tender will be available from the 26th AUGUST and will be forwarded to the Applicants on receipt of a deposit of £2 2s. returnable upon the submission of a bona fide Tender not subsequently withdrawn and the return of all documents.

Tenders are to be returned in plain sealed envelopes endorsed "Tender—D, E, F & G, Town-lane," to the undersigned not later than 5 p.m. on FRIDAY, the 16th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any Tender.

F. ENTWISTLE,
Clerk of the Council.

MIDDLESBROUGH
COUNTY BOROUGH.

PROPOSED ERECTION OF CHILDREN'S HOME, CROFT-AVENUE, MIDDLESBROUGH.

TENDERS are invited for the ERECTION OF A CHILDREN'S HOME in Croft-avenue, Middlesbrough.

Contract period nine months.

Bills of Quantities from the Borough Engineer—deposit two guineas.

Tenders to be received by the Town Clerk on or before TUESDAY, 13th SEPTEMBER, 1960.

GATESHEAD
COUNTY BOROUGH.

GREENWELL COUNTY SECONDARY SCHOOL FOR GIRLS, 4 F.E.

Contractors wishing to TENDER for the ERECTION of the above new school are invited to submit their names together with details of work recently carried out and a deposit cheque for Five pounds (payable to the Borough Treasurer) which will be returnable on receipt of a "bona fide" tender.

The school is in traditional construction with R.C. frame foundations and floors, brickwork gables, curtain walling and timber cladding.

Bills of Quantities will be ready in mid-August and a tendering period of approximately five weeks will be allowed.

Application, details and deposits should be forwarded to the Borough Surveyor, Swinburne-street, Gateshead, not later than THURSDAY, 18th AUGUST, 1960.

C. D. JACKSON,
Town Clerk.

Town Hall,
Gateshead, 8.
KL.MH
2.8.60.

ESSEX
COUNTY COUNCIL.

(1) Civil Defence Head Quarters, Danbury Park, Nr. Chelmsford. PROVISION OF OIL FIRED CENTRAL HEATING.
(2) South West Essex Technical College. PROVISION OF CAR PARKS.
(3) HOSTEL FOR ELDERLY PERSONS, Shernhall-street, Walthamstow.
(4) Great Bardfield County Primary School. KITCHEN.
(5) Shelley County Junior School.
(6) Grays County Technical School—INTERNAL DECORATIONS (2nd advertisement).

Contractors wishing to submit FIRM PRICE TENDERS for the above should forward their names, from which panels will be chosen and provided with Tender documents.

(1) Estimated cost £5,800.
(2) TARPAVING AND DRAINAGE WORKS, estimated cost £2,250.
(3) A three-storey building in traditional construction, estimated cost £65,000. Bills of Quantities are expected to be available mid-October, 1960.
(4) In traditional construction, estimated cost £4,500.
(5) The contract will comprise the CONSTRUCTION OF FOUNDATIONS, PLUMBING, DRAINAGE, FINISHINGS, EXTERNAL WORKS, etc. The buildings will be of prefabricated timber construction and will be supplied and erected by a Sub-Contractor, already nominated within the contract. The value of the whole contract is £37,000.
(6) Estimated cost £2,300.

Separate applications for each contract to reach the undersigned not later than 20th AUGUST, 1960.

H. CONOLLY,
C.B.E., F.R.I.B.A.,
County Architect.

County Hall,
Chelmsford.

WANSTEAD & WOODFORD
BOROUGH.

CONCRETE PALISADE FENCING.

TENDERS are invited for the SUPPLY AND ERECTION of approximately 180 yards 2 ft. 9 in. high exposed aggregate CONCRETE PALISADE FENCING to perimeter of Christchurch Recreation Ground, Wanstead. This section forms part of four-year programme. Tender documents may be obtained from the Borough Engineer, Municipal Offices, E.18, upon payment of £2 deposit, returnable on receipt of bona fide Tender by NOON on 26th AUGUST, 1960.

LINCOLNSHIRE
HOLLAND COUNTY COUNCIL.

BOSTON COLLEGE OF FURTHER EDUCATION.

TENDERS are invited from Building or Civil Engineering Contractors for the DIVERSION OF AN EXISTING MAIN SEWER, involving approximately 630 ft. run of new 48 in. diameter sewer (work to be done during September and October); new access road, temporary and permanent fencing, part stripping of the site and attendance on a piling sub-contractor.

Form of tender, bills of quantities and drawings may be obtained from the County Architect, County Hall, Boston, Lincs., and tenders must be submitted to the undersigned by 10 a.m. on 12th SEPTEMBER, 1960.

H. A. H. WALTER,
Clerk of the County Council.

County Hall,
Boston,
Lincs.

BIRMINGHAM CITY

TO BUILDING CONTRACTORS

CONTRACT 718.
8 FOUR-STOREY DWELLINGS AND 1 SHOP,
POOL FARM ESTATE,
KINGS NORTON.
CONTRACT 733.
12 THREE-STOREY DWELLINGS,
BUNBURY-ROAD ESTATE,
NORTHFIELD.

The House Building Committee invite FIRM-PRICE TENDERS for the ERECTION of the above.

Bills of Quantities and Forms of Tender will be forwarded on payment of £2 2s. for each contract at the office of A. G. Sheppard Fidler, City Architect, Civic Centre, Birmingham, 1, to whom all cheques should be made payable. Applications should be made by 16th AUGUST, 1960. Conditions of Contract (which include the usual Fair Wages and Conditions of Labour Clause) may be seen at the City Architect's Office during normal working hours.

The deposits will be returned on receipt of bona fide tenders or on notification of inability to tender, together with the return of the documents not later than three days before the date for receipt of tenders.

Tenders, enclosed in the envelope provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room No. B.31), Council House, Birmingham, 1, NOT LATER THAN 12 noon on FRIDAY, the 16th SEPTEMBER, 1960. Tenders received after that time will be rejected.

The Committee do not bind themselves to accept the lowest or any tender.

T. H. PARKINSON,
Town Clerk.

The Council House,
Birmingham, 1.

STEPNEY
M.B.C.

MARTINEAU-STREET HOUSING SCHEME, STAGE I (75 DWELLINGS AND TWO SHOPS).

TENDERS are invited for:
(1) THERMOPLASTIC TILE FLOORING (3,250 yards super);
(2) FROSTPROOF WALL TILING (380 yards super); and
(3) ASPHALT ROOFING (1,170 yards super); ASPHALT PAVING (580 yards super); and TARMACADAM PAVING (260 yards super);
the areas indicated being approximate.

Forms of tender, with conditions, etc., obtainable from the Architects, Messrs. Howes & Jackman, at 1 Verulam Buildings, Gray's Inn, W.C.1, to whom application should be made not later than 22nd AUGUST, 1960.

Closing date for TENDERS—12th SEPTEMBER, 1960.

WILFRED REEVE,
Town Clerk.

HUNTINGDONSHIRE
FIRE BRIGADE AND CIVIL DEFENCE COMMITTEES.

PROPOSED THREE-BAY FIRE STATION, RAMSEY.

Contractors desirous of submitting a FIXED-PRICE TENDER for the above project are invited to submit their names to S. M. Holloway, A.R.I.B.A., County Architect, County Buildings, Huntingdon, by not later than 12 noon on MONDAY, 29th AUGUST, 1960. From the names submitted a panel of contractors will be selected to whom tender documents will be sent. The closing date for receipt of tenders will be notified later, but it is thought this will be towards the end of NOVEMBER.

The building will be a single-storey reinforced concrete framed structure on piles with infill panel construction of brickwork built from ground beams. The concrete frame and piled foundation will be nominated sub-contracts.

A. C. AYLWARD,
Clerk of the County Council.

County Buildings,
Huntingdon.
11th August, 1960.

BATH CITY.

SNOW-HILL REDEVELOPMENT DEMOLITION OF 53 PROPERTIES AND THE ERECTION OF 94 DWELLINGS, 35 GARAGES AND A LAUNDRY.

Contractors desirous of TENDERING for the above works should submit their names to the Architects, Messrs. Shailum & Le Fevre, 18 Brock-street, Bath, by the 20th AUGUST, 1960, together with a deposit of two guineas payable to the Bath Corporation, which will be returnable on receipt of a bona fide Tender.

Bills of Quantities, Forms of Tender and instructions regarding the delivery of Tenders will be forwarded as soon as possible after the above date. Drawings may be seen by appointment at the Architects' offices.

The Corporation does not bind itself to accept the lowest or any Tender.

JARED E. DIXON,
Town Clerk.

Guildhall,
Bath.

SOUTH SHIELDS
DISTRICT HOSPITAL MANAGEMENT COMMITTEE.

INGHAM INFIRMARY,
SOUTH SHIELDS.

The Management Committee proposes to ERECT A NEW X-RAY DEPARTMENT adjacent to and linked with the main Hospital Corridor.

The total floor area of this single-storey building will be approximately 5,700 square feet.

Tender documents will be ready for issue to Contractors during AUGUST, 1960, with a view to building operations commencing in the early Autumn.

The project has been planned and will be carried out under the direction of Messrs. S. W. Milburn & Partners, Chartered Architects, of 9 The Esplanade, Sunderland, in conjunction with the Architect to the Newcastle Regional Hospital Board.

Contractors wishing to TENDER for this work are asked to submit their names to the Group Secretary, Ingham Infirmary, South Shields, not later than the 20th AUGUST, 1960. A limited number of Contractors may be selected and asked to tender, but the lowest or any Tender will not necessarily be accepted.

R. HOOD COULTHARD, JR.,
Group Secretary.

SOUTHWICK
URBAN DISTRICT COUNCIL.

SOUTHWICK TOWN CENTRE.

Building contractors who wish to be considered for invitation to submit a fixed price TENDER for the ERECTION OF 32 SHOPS, 32 FLATS AND MAISONETTES OVER AND 32 GARAGES IN FOUR THREE-STOREY BLOCKS are asked to register their names with me by not later than 12 NOON on 19th AUGUST, 1960.

Plans of the proposed shops, etc., may be seen on application at this office during normal business hours.

A. R. SHOTT,
Clerk of the Council.

Town Hall,
Southwick,
Sussex.
15th July, 1960.

HEREFORDSHIRE
COUNTY COUNCIL.

Contractors are invited to TENDER for the formation of PLAYING FIELDS at the County Secondary School under construction at Kington. The work includes grading, preparation, seeding, jumping pits, non-turf wickets, etc.

Applicants who have not previously tendered for similar work for the Authority, should enclose a short list of playing fields contracts carried out (with contract figures) and the names of two or three Authorities or persons to whom reference may be made.

Applications to County Architect, Bath-street, Hereford, by 22nd AUGUST, 1960.

EAST SUSSEX
COUNTY COUNCIL.

HAILSHAM CIVIL DEFENCE TRAINING CENTRE.

TENDERS are invited for ALTERATIONS, ADAPTATIONS AND REPAIRS TO A DRILL HALL to form a new Civil Defence Training Centre at Hailsham.

Contractors wishing to tender should apply before 26th AUGUST, 1960, to the County Architect, County Hall, Lewes, Sussex.

Selected Contractors will be provided with specification on 3rd SEPTEMBER, 1960.

FARNHAM
URBAN DISTRICT COUNCIL.

CONSTRUCTION OF TWO PAIRS OF TWO-BEDROOMED HOUSES AT PINE VIEW-CLOSE, RADSHOT LEA, FARNHAM.

FIXED PRICE TENDERS are invited for the CONSTRUCTION of the above-mentioned dwellings. Forms of Tender, Specification and Bills of Quantities may be obtained and the Conditions of Contract and Drawings inspected at the office of the Council's Architects, Messrs. Gilbert & Hobson, A.R.I.B.A., 69a Castle-street, Farnham, Surrey, upon payment of a deposit of £2 which will be returned upon receipt of a bona fide Tender (not subsequently withdrawn) or upon the return of the documents.

Tenders must be delivered to the undersigned in a plain sealed envelope endorsed "Tender for houses at Pine View-close" not later than noon on the 16th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any tender.

H. W. UNDERDOWN,
Clerk of the Council.

Council Offices,
South-street,
Farnham,
Surrey.

FARNHAM
URBAN DISTRICT COUNCIL.

CONSTRUCTION OF 12 FLATS IN TWO BLOCKS AND TWO PAIRS OF SEMI-DETACHED BUNGALOWS, AT LOWER SOUTH VIEW AND BEAR-LANE, FARNHAM.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION of the above-mentioned dwellings. Form of tender, Specification and Bills of Quantities may be obtained and the Conditions of Contract and Drawings inspected at the office of the Council's Architects, Messrs. A. J. and L. R. Stedman, F.A.R.I.B.A., 36 South-street, Farnham, Surrey, upon payment of a deposit of £2 which will be returned upon receipt of a bona fide tender (not subsequently withdrawn) or upon the return of the documents.

Tenders must be delivered to the undersigned in a plain sealed envelope endorsed "Tender for Dwellings at Lower South View and Bear-lane" not later than noon on the 16th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any tender.

H. W. UNDERDOWN,
Clerk of the Council.

Council Offices,
South-street,
Farnham,
Surrey.

WATFORD
RURAL DISTRICT COUNCIL.

PROPOSED SOCIAL CENTRE, SOUTH OXHEY.

The Council invite TENDERS for the ERECTION OF A SOCIAL CENTRE on a site at Oxhey Place, South Oxhey, in accordance with plans which may be inspected at the Council Offices.

Contractors should apply by the 29th AUGUST, 1960, for the supply of copies of the Bills of Quantities and form of tender, which will be issued after that date. Applications must be accompanied by a deposit of two guineas (£2 2s.) which will be repayable after the submission of a bona fide tender and the return of all documents supplied.

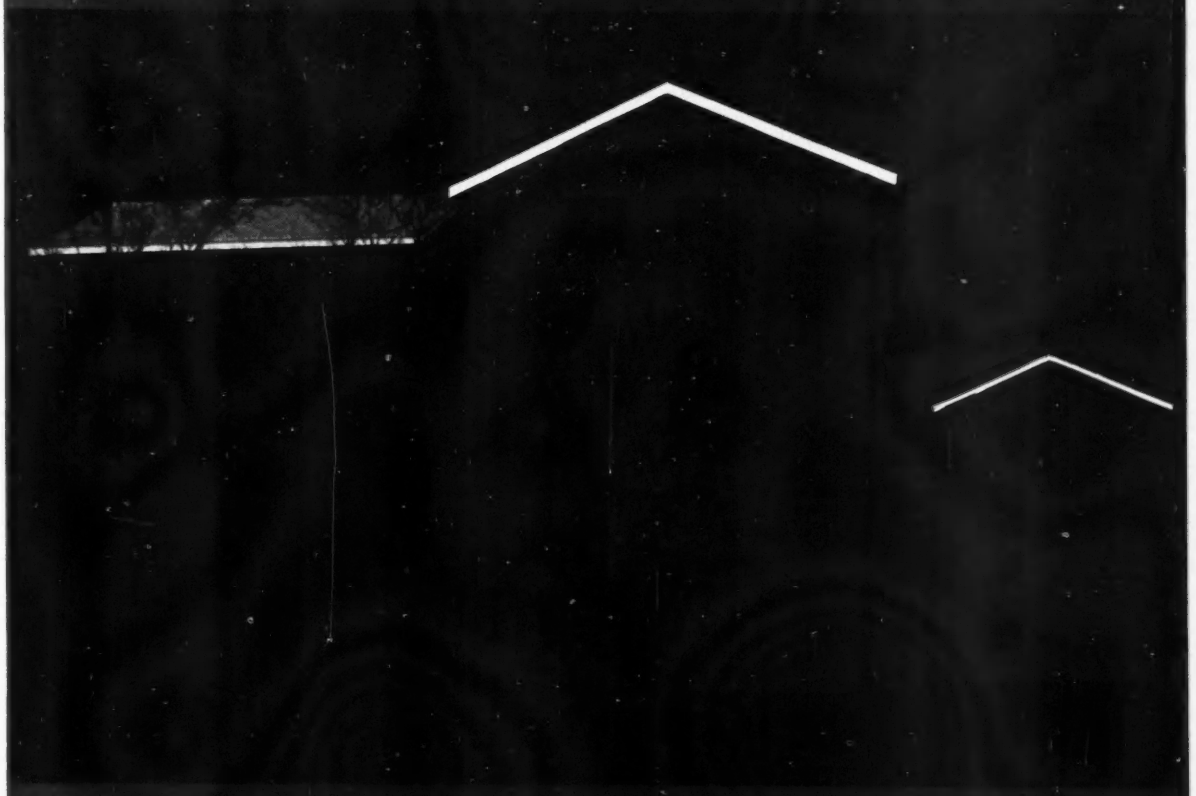
Directions for the submission of tenders will be issued to applicant Contractors with copies of the tender documents.

The Council do not bind themselves to accept the lowest or any tender and security will be required for the due performance of the Contract.

S. A. NICHOLSON,
Clerk to the Council.

Council Offices,
Wynyard House,
99 Lanagley-road,
Watford,
Herts.

The pitch of this roof is 22½°...



Tiled with

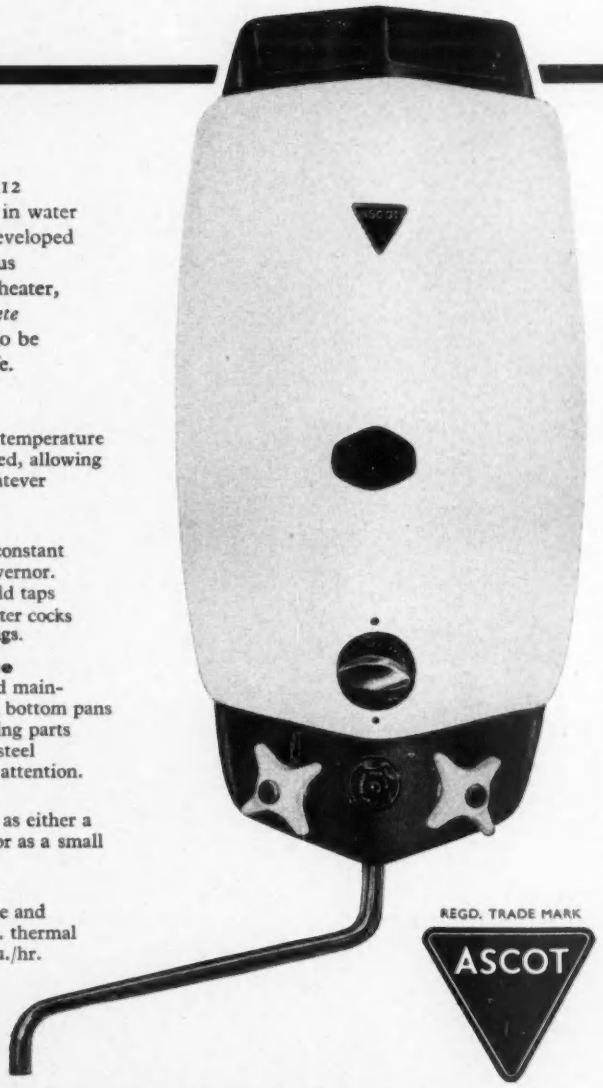
MARLEY yeoman roof tiles

MARLEY

Introducing the

Ascot De Luxe G512

the new water heater giving complete control



The New Ascot De Luxe type G512 represents the latest developments in water heater design and performance. Developed by Ascot for use as an instantaneous multipoint and single-point water heater, this Ascot De Luxe with its *complete* controls for gas and water is sure to be popular with the modern housewife. Here are some of its features:

Temperature Selector
A temperature selector controlling a temperature rise between 45°-100°F is incorporated, allowing the housewife to choose water at whatever heat she wants.

Gas and Water Controls
The Ascot De Luxe is fitted with a constant volume gas governor and a water governor. External controls include hot and cold taps and a rotary gas control. Gas and water cocks are an integral part of the heater linings.

Ease of Fixing and Maintenance
The De Luxe ensures easy fixing and maintenance. The outer case and top and bottom pans are quickly detachable, and all working parts are readily accessible. The stainless steel Ascot 'flat flame' burner needs little attention.

Versatility
The De Luxe is designed to operate as either a single point heater with a 9" spout, or as a small multipoint heater.

Performance
The De Luxe is 23¼" high, 10¼" wide and 8 5/16" deep and gives 30,000 B.t.u./hr. thermal output from an input of 40,000 B.t.u./hr. producing 0.5 g.p.m. raised 100°F, 0.625 g.p.m. raised 80°F, and pro rata. Pilot consumption is 250 B.t.u./hr.

For full details of the Ascot De Luxe type G512 write to
ASCOT GAS WATER HEATERS LIMITED, 255 NORTH CIRCULAR ROAD, NEASDEN, N.W.10

REGD. TRADE MARK
ASCOT

A Radiation Company

NORTHUMBERLAND
COUNTY COUNCIL.

COUNTY SURVEYOR'S DEPARTMENT.
PROPOSED HIGHWAY DEPOT, WOOLER.

LUMP SUM TENDERS are invited for the CONSTRUCTION OF A FOUR-BAY LOCK-UP GARAGE, WORKSHOP AND STORES BLOCK, with all services, at Haugh Head, Wooler.

Drawings, Specifications, Conditions of Contract and Form of Tender may be obtained from the County Surveyor, Phoenix House, Queen-street, Newcastle upon Tyne 1. Tenders should be sent to the undersigned to arrive not later than 9 a.m. on MONDAY, 29th AUGUST, 1960.

E. P. HARVEY,
Clerk of the County Council.
County Hall,
Newcastle upon Tyne, 1.

NORTHUMBERLAND
COUNTY COUNCIL.

COUNTY SURVEYOR'S DEPARTMENT.
PROPOSED HIGHWAY DEPOT, BELFORD.

LUMP SUM TENDERS are invited for the CONSTRUCTION OF A TWO-BAY LOCK-UP GARAGE AND WORKSHOP BLOCK with all services on Station-road, Belford.

Drawings, Specifications, Conditions of Contract and Form of Tender may be obtained from the County Surveyor, Phoenix House, Queen-street, Newcastle upon Tyne, 1. The Tender should be sent to the undersigned to arrive not later than 9 a.m. on MONDAY, 29th AUGUST, 1960.

E. P. HARVEY,
Clerk of the County Council.
County Hall,
Newcastle upon Tyne, 1.

DORKING
URBAN DISTRICT COUNCIL.

PROPOSED BLOCK OF 29 DWELLINGS, HAMPSTEAD-ROAD, DORKING.

The Council invite applications from Building Contractors to TENDER on a FIXED PRICE BASIS for the ERECTION OF 2 HOUSES, 21 FLATS AND 6 MAISONETTES in three continuous sections in two, three and four storeys respectively, to be built in crosswall construction with reinforced concrete retaining wall, road works and pavings.

The Architects are Messrs. Howard V. Lobb and Partners, F./F.R.I.B.A.

Applications to be received by the undersigned, Dorking Urban District Council, Pippbrook, Dorking, Surrey, by 26th AUGUST, 1960, together with particulars of similar works previously undertaken, and names of Architects from whom references may be obtained. From these applications a selected list of Tenderers will be made, and those selected will be notified, and will be required to make a deposit of £2 2s. for the Bills of Quantities and Form of Tender.

It is anticipated that the Bills of Quantities and Form of Tender will be ready on or about 24th OCTOBER, 1960, and the deposit will be refunded on receipt of a bona fide Tender, or the return of all loaned documents.

The Council do not bind themselves to accept the lowest or any Tender.

F. G. SUTHERLAND,
Clerk of the Council.

August, 1960.

WIGAN
COUNTY BOROUGH.

ERECTION OF 27 DWELLINGS—DRUMMOND-SQUARE SITE, LAITHWAITE HOUSING ESTATE.

The Council invites TENDERS for the PROPOSED ERECTION OF THE FOLLOWING DWELLINGS, all of traditional construction:—

TWELVE TYPE "E1" THREE-BEDROOM HOUSES at end of blocks.
SEVEN TYPE "E2" THREE-BEDROOM HOUSES in middle and at end of blocks.
FOUR TYPE "F1" CORNER BLOCKS COMPRISING TWO FLATS, one- and two-bedroom.

Tenders to be on a "Fixed Price" basis and on Bills of Quantities, which will be available on or after Friday, the 5th August, 1960, by application to Mr. G. Keighley, B.Sc., Borough and Water Engineer, Municipal Buildings, Library-street, Wigan, and on payment of a deposit of Two Guineas (cheques payable "Wigan Corporation"), which will be returned on receipt of a bona fide Tender received before the closing time on the last day of Tendering.

Drawings, Conditions of Contract and the Council's Standing Orders may be inspected at the Office of the Borough and Water Engineer during normal office hours by all persons having made the necessary application to Tender.

When applying for Bills of Quantities, Tenderers should also submit details of similar schemes undertaken by them, together with the names of two independent persons to whom reference can be made concerning such schemes. Evidence should be submitted at the same time that the Tenderer will have the organisation and labour to carry out the work expeditiously.

Tenders must be delivered to the Office of the undersigned not later than 10 a.m. on MONDAY, the 12th SEPTEMBER, 1960.

ALLAN ROYLE,
Town Clerk.
Municipal Buildings,
Wigan.

FARNHAM
URBAN DISTRICT COUNCIL.

CONSTRUCTION OF ONE PAIR OF THREE-BEDROOMED HOUSES AT BALDREYS, FARNHAM.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION of the above-mentioned dwellings. Form of Tender, a Specification and Drawings may be obtained from the office of the Council's Architects, Messrs. Gilbert & Hobson, A./L.R.I.B.A., 69a Castle-street, Farnham, Surrey, and the Conditions of Contract inspected upon payment of a deposit of £2 which will be returned upon receipt of a bona fide Tender (not subsequently withdrawn) or upon the return of the documents.

Tenders must be delivered to the undersigned in a plain sealed envelope endorsed "Tender for Houses at Baldreys" not later than noon on the 16th SEPTEMBER, 1960.

The Council does not bind itself to accept the lowest or any tender.

H. W. UNDERDOWN,
Clerk of the Council.
Council Offices,
South-street,
Farnham,
Surrey.

HUNTINGDONSHIRE

STANDING JOINT COMMITTEE.
POLICE HOUSING.

FIXED-PRICE TENDERS are invited for the following POLICE HOUSING:
Sawtry. ERECTION OF POLICE HOUSE, OFFICE AND GARAGE.
Stilton. ERECTION OF POLICE HOUSE, OFFICE AND GARAGE.

Bills of Quantities, Forms of Tender and Drawings will be available from FRIDAY, 19th AUGUST, 1960, and may be obtained from S. M. Holloway, A.R.I.B.A., County Architect, County Buildings, Huntingdon.

Sealed Tenders in the endorsed envelope provided, with no other identification marks, must be delivered by 12 noon on MONDAY, 12th SEPTEMBER, 1960.

The Council do not bind themselves to accept the lowest or any tender.

A. C. AYLWARD,
Clerk of the County Council.
County Buildings,
Huntingdon.
11th August, 1960.

SWINTON & PENDLEBURY
BOROUGH.

THE ERECTION AND COMPLETION OF 70 HOUSES AND 6 BLOCKS OF 4 FLATS TOGETHER WITH THE CONSTRUCTION OF ROADS AND SEWERS AT THE BEEHIVE ESTATE (SECTION 3), CLIFTON, LANCASHIRE.

TENDERS are invited from suitable contractors for the above work. Bills of Quantities and Forms of Tender will be available from the 1st SEPTEMBER, 1960, and may be obtained from the Borough Engineer and Surveyor, Town Hall, Swinton, Lancs. Closing date for receipt of tenders 3rd OCTOBER, 1960.

CARDIFF CITY.

CITY ARCHITECT'S DEPARTMENT.
PROPOSED TEACHER TRAINING COLLEGE, CYNCOED.

FIXED-PRICE TENDERS are invited for the ERECTION OF A NEW TEACHER TRAINING COLLEGE for 400 students, with Residential Accommodation for 300 students and staff.

The College is of one-, two- and three-storey construction, 71,367 sq. ft. floor area, and the Residential Accommodation is of two- and three-storey construction, 66,467 sq. ft. floor area. The total value of the works is approximately £550,000.

The whole of the works are to be complete by JUNE, 1962.

The site preparation works are now being carried out under a separate contract.

The tender documents will be available on the 1st SEPTEMBER, 1960.

Conditions of Contract, Drawings and Specification may be inspected at the City Architect's Department, Municipal Offices, Greyfriars-road, Cardiff.

Specification, Bills of Quantities and Form of Tender may be obtained from the City Architect to whom application should be made, accompanied by a deposit of £2 2s. Cheques should be made payable to the Cardiff Corporation and crossed "Not negotiable and Co." The deposit will be refunded on receipt of a bona fide tender or the return of the contract documents.

Tenders will not be considered unless enclosed in the envelope provided and endorsed "Tender for Teacher Training College, Cyncoed" addressed to the Town Clerk at the City Hall, Cardiff, and sent by REGISTERED POST so as to be received not later than the 29th SEPTEMBER, 1960.

The envelope must not bear the name of or any mark indicating the identity of the Tenderer.

Completed Bills of Quantities must not be submitted with the Tender but must be sent, completed in ink, so as to be in the hands of the City Architect within three days after written request following the opening of Tenders.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES,
Town Clerk.
City Hall,
Cardiff.
August, 1960.

CARDIFF CITY.

CITY ARCHITECT'S DEPARTMENT.
TENDER FOR THE ERECTION OF 70 DWELLINGS AT VARIOUS SITES IN CARDIFF.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION OF SUPERSTRUCTURE only of the following dwellings on existing foundations in three contracts.

Group 1 — 46 SINGLE-BEDROOM FLATS in 1 two- and 1 three-storey blocks, Shaw-close, Llanrumney.
Group 2 — 2 THREE-BEDROOM HOUSES, Hazlett-close, Llanrumney.
Group 3 — 22 SINGLE-BEDROOM FLATS in 2 two-storey blocks, Maitland-place, Grangetown.

Contractors may tender for one or more contracts but each contract must be tendered for separately.

Conditions of Contract, Drawings and Specifications may be inspected at the City Architects Department, Municipal Offices, Greyfriars-road, Cardiff.

Drawings, Bills of Quantities and Form of Tender may be obtained from the City Architect to whom application should be made, accompanied by a deposit of £2 2s., for each contract. Cheques should be made payable to the Cardiff Corporation and crossed "Not negotiable and Co." The deposit will be refunded on receipt of a bona fide tender or the return of the contract documents.

Tenders will not be considered unless enclosed in the envelope provided and endorsed "Tender for . . . . Dwellings at . . ." (as the case may be) to the Town Clerk at the City Hall, Cardiff, and sent by REGISTERED POST so as to be received not later than the 13th SEPTEMBER, 1960.

The envelope must not bear the name of or any mark indicating the identity of the Tenderer.

Completed Bills of Quantities must not be submitted with the Tender but must be sent, completed in ink, so as to be in the hands of the City Architect within three days after written request following the opening of Tenders.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES,
Town Clerk.
City Hall,
Cardiff.
August, 1960.

CARDIFF CITY.

CITY ARCHITECT'S DEPARTMENT.
TENDER FOR THE ERECTION OF 194 DWELLINGS AT RUMNEY, BUTETOWN AND ELY NORTH.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION of the following DWELLINGS in three contracts.

GROUP 1—105 DWELLINGS, MANORBIER-CRESCENT EXTENSION RUMNEY, COMPRISING:

6 ONE-BEDROOM BUNGALOWS in two blocks.
10 THREE - BEDROOM SEMI-DETACHED HOUSES.
5 THREE-BEDROOM TERRACE HOUSES in one block.
72 ONE-BEDROOM FLATS in five three-storey blocks.
12 ONE- AND TWO-BEDROOM FLATS in one block.

GROUP 2
39 DWELLINGS, LOUDOUN-SQUARE, BUTETOWN COMPRISING:
27 ONE-BEDROOM FLATS in three three-storey blocks.
12 THREE- AND FOUR-BEDROOM FOUR-STOREY MAISONETTES in one block.

GROUP 3
50 DWELLINGS, 1 SHOP AND 6 GARAGES AT GREEN FARM, ELY NORTH.
46 TWO-STOREY ONE-BEDROOM FLATS.
3 THREE-BEDROOM HOUSES.
1 SHOP WITH THREE-BEDROOM LIVING ACCOMMODATION.
6 BRICK GARAGES.

Contractors may tender for one or more contracts but each contract must be tendered for separately.

Conditions of Contract, Drawings and Specifications may be inspected at the City Architect's Department, Municipal Offices, Greyfriars-road, Cardiff.

Drawings, Bills of Quantities and Form of Tender may be obtained from the City Architect to whom application should be made, accompanied by a deposit of £2 2s., for each contract. Cheques should be made payable to the Cardiff Corporation and crossed "Not negotiable and Co." The deposit will be refunded on receipt of a bona fide tender or the return of the contract documents.

Tenders will not be considered unless enclosed in the envelope provided and endorsed "Tender for . . . . Dwellings at . . ." (as the case may be), addressed to the Town Clerk at the City Hall, Cardiff, and sent by REGISTERED POST so as to be received not later than the 13th SEPTEMBER, 1960.

The envelope must not bear the name of or any mark indicating the identity of the Tenderer.

Completed Bills of Quantities must not be submitted with the Tender but must be sent completed in ink, so as to be in the hands of the City Architect within three days after written request following the opening of Tenders.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES,
Town Clerk.
City Hall,
Cardiff.
August, 1960.

HACKNEY
METROPOLITAN BOROUGH

The Metropolitan Borough of Hackney are at present engaged in an extensive programme arising from the conversion into self-contained flats of houses too large for single family occupation.

Inquiries are invited from BUILDING CONTRACTORS in the Metropolitan area who are in a position to accept this type of work during the next few months. Particulars may be obtained from the Housing Manager, 219 Mare-street, E.8.

LUTON
BOROUGH.

FIXED-PRICE TENDERS invited for the ERECTION AND COMPLETION OF EIGHTEEN FLATS in three blocks, Lewsey Farm Estate. Documents from Borough Architect, Town Hall, Luton. Tenders to Town Clerk by noon on THURSDAY, 22nd SEPTEMBER, 1960.

CARDIFF CITY.

CITY ARCHITECT'S DEPARTMENT.
ERECTION OF 219 LOCK-UP GARAGES AND SITEWORKS ON VARIOUS SITES.

FIXED-PRICE TENDERS are invited for the ERECTION OF A TOTAL OF 219 LOCK-UP GARAGES AND SITE WORKS in eight contracts as follows:

Contract 1—48 GARAGES, Heol Trelai, Ely South.
Contract 2—6 GARAGES, Blue House-road, Llanishen; 27 GARAGES, Whitebarn-road, Llanishen.
Contract 3—14 GARAGES, Llandudno-road, Rumney.
Contract 4—14 GARAGES, Honiton-road, Llanrumney; 18 GARAGES, Burnham-avenue, Llanrumney; 23 GARAGES, Porlock-road, Llanrumney.
Contract 5—10 GARAGES Sudcroft-street, Leckwith.
Contract 6—14 GARAGES, Lydstep-crescent, Gabalfa.
Contract 7—24 GARAGES, Hirst-crescent, Fairwater.
Contract 8—21 GARAGES, Deere, Wilson-road, Ely North.

Contractors may tender for one or more contracts, but each contract must be tendered for separately.

Conditions of Contract, Drawings and Specification may be inspected at the City Architect's Department, Municipal Offices, Greyfriars-road, Cardiff.

Specification, Drawings and Form of Tender may be obtained from the City Architect to whom application should be made, accompanied by a deposit of £2 2s., in respect of each contract. Cheques should be made payable to the Cardiff Corporation and crossed "Not negotiable and Co." The deposit will be refunded on receipt of a bona fide tender or the return of the contract documents.

Tenders will not be considered unless enclosed in the envelope provided and endorsed "Tender for . . . . Garages—Contract No. . . ." (as the case may be), addressed to the Town Clerk at the City Hall, Cardiff, and sent by REGISTERED POST so as to be received not later than the 13th SEPTEMBER, 1960.

The envelope must not bear the name of or any mark indicating the identity of the Tenderer.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES,
Town Clerk.
City Hall,
Cardiff.
August, 1960.

PUBLIC APPOINTMENTS

MAIDSTONE
BOROUGH.

Applications are invited for the appointment of a TECHNICAL ASSISTANT in the Housing Department, for work on improvements to Council dwellings.

Preference will be given to applicants who have passed the Intermediate examination of the Royal Institute of Chartered Surveyors (Building Section), or hold a similar qualification.

Salary within Grade A.P.T. II (£765-£880 p.a.), commencing salary dependant upon qualifications and experience.

Where circumstances warrant, the Council will be prepared to consider provision of housing accommodation.

Forms and particulars from Housing Manager, 13 Tonbridge-road, Maidstone.

T. SCHOLES,
Town Clerk.
12th August, 1960.

SOUTHEND-ON-SEA
COUNTY BOROUGH.

BOROUGH ARCHITECT'S DEPARTMENT.
ASSISTANT QUANTITY SURVEYORS.

Applications are invited for ASSISTANT QUANTITY SURVEYORS to be appointed according to experience within grades A.P.T. III to V (£880-£1,375).

A house will be available and removal expenses paid to successful applicants.

Applications, with usual particulars and the names of referees, should be sent to the Borough Architect, 30 Alexander-street, Southend-on-Sea, by MONDAY, 29th AUGUST, 1960.

ARCHIBALD GLEN, Town Clerk.

SURREY COUNTY COUNCIL

Applications invited from persons with necessary qualifications for appointment as

ASSISTANT ARCHITECTS

GRADE V (£1,220—£1,375 p.a. plus £45 p.a. London Allowance). Must be A.R.I.B.A.

Applications stating fully age, qualifications, experience and present salary, accompanied by copies of three testimonials to **County Architect, County Hall, Kingston** as soon as possible.

CASTLEFORD
BOROUGH.

APPOINTMENTS IN THE BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following appointments:—

SENIOR ASSISTANT ENGINEER. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £905 per annum, rising to £1,070 per annum. Applicants must be Corporate Members of the Institution of Municipal and/or Civil Engineers, and have had experience in a Municipal Engineer's Office.

ASSISTANT ENGINEER. Salary—Grade A.P.T. II (£765-£880). Applicants should have completed a recognised form of training as Municipal Engineers and should preferably have passed the Joint Part I Examination of the Institution of Civil and Municipal Engineers.

SENIOR ASSISTANT ARCHITECT. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £905 per annum, rising to £1,070 per annum. Applicants must be Associate Members of the R.I.B.A. and/or Registered Architects, and have had some years' practical experience.

ARCHITECTURAL ASSISTANT. Salary—Grade A.P.T. II (£765-£880). Applicants should have passed the Intermediate Examination of the R.I.B.A. or its equivalent at one of the recognised Schools of Architecture.

N.J.C. Service conditions; superannuable; terminable by one month's notice on either side. The successful applicants will be required to pass satisfactorily a medical examination.

If required housing accommodation will be provided for successful married applicants.

Applications, on forms obtainable from me, to be returned by the 31st AUGUST, 1960.

Canvassing disqualifies.

ERNEST HUTCHINSON,
Town Clerk.

SURREY
COUNTY COUNCIL.

Applications invited for appointment of BUILDING SURVEYORS in County Architect's Department on Grade A.P.T. III, £880-£1,065 p.a. plus London Weighting.

Preference will be given to candidates who have passed the intermediate examination of the R.I.C.S. Building Section.

Applicants should have a sound knowledge of building construction and be able to prepare plans and specifications, and to supervise alteration works.

Applications, stating age, education and experience, to the County Architect, County Hall, Kingston, as soon as possible.

KEYNSHAM
URBAN DISTRICT COUNCIL.

APPOINTMENT OF QUANTITY SURVEYOR.

Applications are invited for the appointment of QUANTITY SURVEYOR in the Engineer and Surveyor's Department. Salary Grade A.P.T. III (£880-£1,065), according to qualifications and experience.

Applicants should have passed the Final Examination of the appropriate professional body and should have had experience in Taking Off building quantities for housing and other building works, together with contract negotiations, site measurement and settlement of interim certificates and final accounts.

The appointment will be subject to the Local Government Superannuation Acts, and to the submission of a satisfactory medical report. Housing accommodation will be made available.

Applications, stating age, qualifications and particulars of experience, and the names of two referees, should reach the Clerk of the Council, Council Offices, Keynsham, Bristol, by MONDAY, 29th AUGUST, 1960.

AIR MINISTRY

Require CLERKS OF WORKS (BUILDING) at R.A.F. and Ministry of Aviation stations for supervision of construction and maintenance work. Candidates must hold O.N.C. (Building) *or* Intermediate C. and G. Certificate in a craft, *or* Associate Membership of Institute of Clerks of Works *or* equivalent qualification. Must also have served apprenticeship as craftsmen with three years' experience as foreman of trade and have experience as general foreman or clerk of works on big contracts. Three years' full-time or five years' part-time training in a building school or three years' experience in a building office in estimating, costing and management accepted in lieu of apprenticeship. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 18 days' paid leave a year initially. Overseas tours for which special allowances granted.

Salary ranges from £680 to £785 rising by annual increments to £850. Commencing salary dependent upon age, qualifications and experience. Applicants, who must be natural born British subjects and not over age 45 years, should write, stating age, qualifications and experience, to Manager (P.E. 1048), Professional and Executive Register, Ministry of Labour, Atlantic House, Farringdon-street, London, E.C.4. No original testimonials should be sent. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only candidates selected for interview will be advised.

QUANTITY SURVEYORS

Pensionable posts for men and women in:

ADMIRALTY
AIR MINISTRY
MINISTRY OF EDUCATION
MINISTRY OF HEALTH
MINISTRY OF HOUSING AND LOCAL GOVERNMENT
DEPARTMENT OF AGRICULTURE AND FISHERIES FOR SCOTLAND
WAR DEPARTMENT
MINISTRY OF WORKS

Age at least 25 and under 35 or 1.1.60 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Quantity Surveyor). Candidates must have achieved Corporate Membership of R.I.C.S. (Quantities Section) or have passed examination necessary for attaining such membership. Salary (men, London) £830—£1,125 according to age, rising to £1,300. Promotion prospects. Write **Civil Service Commission, 17 North Audley Street, London, W.1.** for application form quoting S/63.

ISLE OF WIGHT
COUNTY COUNCIL.

Vacancy for DRAUGHTSMAN (male or female) in County Planning Officer's Department; general experience of tracing and map work required. Salary A.P.T. I (£610 x £30(4) x £35(1)-£765).

Applications stating full particulars and names of two persons to whom reference may be made to reach the Clerk of the County Council, County Hall, Newport, I.W., by 30th AUGUST, 1960.

SALOP
COUNTY.

ARCHITECT'S DEPARTMENT.

There is a vacancy on the established staff for a qualified ASSISTANT ARCHITECT. Salary Grade £785-£1,070 p.a.—commencing point depending on ability and experience. N.J.C. Conditions. Five-day week. A disturbance allowance or weekly separation allowance may be paid to a married man taking up this appointment. Conditions of service and application forms obtainable from Ralph Crowe, A.A.Dipl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London-road, Shrewsbury. Closing date 3rd SEPTEMBER, 1960.

DUNSTABLE
BOROUGH.

Applications are invited for the appointment of BUILDING INSPECTOR at a salary within Grade A.P.T. II (£765-£880).

Candidates should have had considerable experience in a similar capacity and have a good knowledge of building bye-laws and planning procedure. Preference will be given to persons holding the Building Inspector's Certificate of the Institution of Municipal Engineers.

An Essential Car User allowance not exceeding 1,199 cc. will be paid and housing accommodation will be provided if required. The Council are also prepared to pay 50 per cent. of removal expenses.

Applications, stating age, experience, qualifications, past and present appointments, and giving the names and addresses of two referees, to be sent to the undersigned not later than 27th AUGUST, 1960.

JACK SMITH,
Town Clerk.

Municipal Offices,
Dunstable,
Beds.
11th August, 1960.

LEEDS CITY.

CITY ARCHITECT'S DEPARTMENT.
QUANTITY SURVEYING STAFF.

A number of vacancies occur in the Quantity Surveying Section which deals with the preparation of bills of quantities and other work in connection with the large building programmes of the department. These programmes include schools, housing with multi-storey flats, hostels and other interesting projects and the posts offer opportunities to work as part of a team in a progressive office.

Post No. 1: SENIOR ASSISTANT QUANTITY SURVEYOR, Grade B. Salary Scale £1,320-£1,485.

Applicants should have wide experience in the preparation of bills of quantities for major works including schools.

Post No. 2: SENIOR ASSISTANT QUANTITY SURVEYOR, Grade A. Salary Scale £1,310-£1,420.

Applicants should have considerable experience in Taking Off and preference will be given to those with experience in cost analysis and cost planning.

Post No. 3: SENIOR ASSISTANT QUANTITY SURVEYORS, Grade A.P.T. V, Salary Scale £1,220-£1,375.

Applicants should have considerable experience in Taking Off, in the measurement of work in progress and the settlement of final accounts for major schemes.

Post No. 4: SENIOR ASSISTANT QUANTITY SURVEYORS, Grade A.P.T. IV, Salary Scale £1,065-£1,220.

Post No. 5: SENIOR ASSISTANT QUANTITY SURVEYORS, Grade A.P.T. III, Salary Scale £880-£1,065.

Applicants for posts Nos. 4 and 5 should be experienced in the measurement of variations and the settlement of final accounts for large schemes and should have some experience of Taking Off.

Post No. 6: SENIOR WORKER-UP, Grade A.P.T. III, Salary Scale £880-£1,065.

It is essential that applicants for this post should have the ability to write a good bill for major schemes and should have wide experience of this type of work in a professional office.

Applicants for posts Nos. 1, 2 and 3 should hold appropriate professional qualifications and applicants for posts Nos. 4 and 5 should have reached the appropriate standards of qualification and preference will be given to those qualifying for the Quantities sub-division of the R.I.C.S.

The appointments are superannuable—medical examination.

Further details and application forms may be obtained from the undersigned and applications are to be returned by 12 NOON on MONDAY, 5th SEPTEMBER, 1960.

Canvassing disqualifies.

J. R. SHERIDAN-SHEDDEN,
City Architect.

Priestley House,
Quarry-hill,
Leeds, 9.

MINISTRY OF AVIATION

require TECHNICIAN at Farnborough, Hants., to supervise a section of direct labour engaged on building and civil engineering, and to assist in the operation of a planned maintenance scheme. QUALIFICATIONS: Recognised apprenticeship in building trade; O.N.C.; appropriate C. & G. Final Certificates or equivalent. Wide experience building techniques in brickwork, carpentry and joinery, sewage and high quality reinforced concrete. Ability to act on own initiative essential. SALARY: £680 (age 24)-£850. Application form from Manager (P.E. 2430), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon-street, London, E.C.4.

STOURBRIDGE
BOROUGH.

BOROUGH ENGINEER'S DEPARTMENT.

SENIOR ASSISTANT ARCHITECT.

Applications are invited for the above post. Salary: A.P.T. Grade III to IV (£880-£1,065—£1,220) commencing according to qualifications and experience. Superannuable, subject to medical examination.

Living accommodation available if appropriate.

Applicants must be Associates of the Royal Institute of British Architects.

Applications stating age, qualifications and experience, together with copies of three testimonials, to be sent to H. W. Morris, B.Sc.(Eng.), A.M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, Council House, Stourbridge, not later than 25th AUGUST, 1960.

A. P. DRURY,
Town Clerk.

Council House,
Stourbridge.
27th July, 1960.

LANCASHIRE
COUNTY COUNCIL.

Applications are invited for the following appointments, on the permanent staff of the Architect's Department.

TWO HEATING ENGINEERS—£1,065-£1,220 and £880-£1,065.

Applicants should be Corporate Members of the I. H. & V. E. or hold exempting qualifications. Candidates should have a wide experience in designing heating, ventilating and domestic hot water installations and other services for large buildings including schools and colleges.

ELECTRICAL ENGINEER — £785-£1,070.

Applicants should have passed the qualifying examination of the I.E.E. or hold exempting qualifications, and should have experience in designing power and lighting schemes for large buildings, including schools and technical colleges.

Forms of application obtainable from and returnable to the County Architect, P.O. Box 26, County Hall, Preston, by 29th AUGUST, 1960.

BLETCHLEY
URBAN DISTRICT COUNCIL.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited from experienced persons for the position of CLERK OF WORKS in connection with the further expansion of the town under the Town Development Act, 1952, which is likely to include the erection of Houses, Flats, Bungalows, Shops, Factories, etc., etc.

Salary will be in accordance with the National Joint Council Scale of Salaries, Miscellaneous Division, Grade 6 (£715-£775). The appointment will be in accordance with the National Scheme of conditions of service, one month's notice on either side and to the passing of a medical examination.

Housing accommodation will be made available if required.

Application, stating age and full details of experience, together with the names and addresses of two persons to whom reference may be made, should be delivered to the undersigned by FIRST POST on MONDAY, 29th AUGUST, 1960.

J. F. SMITHIE, M.I.Mun.E.,
Engineer and Surveyor.

Council Offices,
Bletchley.
5th August, 1960.

LIVERPOOL CITY

CITY BUILDING SURVEYOR'S DEPARTMENT.

Applications are invited for appointments of JUNIOR ASSISTANTS (SURVEYING). Salary £610-£765 (A.P.T. I), according to experience.

Applicants must possess the Intermediate Certificate of the Royal Institution of Chartered Surveyors (Sub-Division III—Building) or equivalent qualification or the Higher National Certificate in Building. The duties are the examination of (a) building work to ensure compliance with building legislation and the securing of dangerous structures; (b) building plans to ensure compliance with building legislation, or (c) factories and other buildings with respect to the provision of means of escape in case of fire.

Application forms obtainable from the City Building Surveyor, Municipal Buildings, Dale-street, Liverpool, 2.

The appointments are superannuable and subject to the Standing Orders of the City Council. Canvassing disqualifies.

THOMAS ALKER,
Town Clerk (J.6342).

WARWICK.
BOROUGH

APPOINTMENT OF CHIEF ASSISTANT ARCHITECT.

Applications are invited from QUALIFIED ARCHITECTS for the above appointment within the special grade, £785-£1,070.

Applications together with names and addresses of two persons to whom reference may be made must be delivered to my office not later than the 29th of AUGUST, 1960.

Housing accommodation will be provided if necessary and removal expenses paid.

C. E. BROWN, A.M.I.Mun.E.,
Borough Engineer and Surveyor
23 Jury-street,
Warwick.

HESTON AND ISLEWORTH
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF TEMPORARY CLERK OF WORKS.

Applications are invited for the above post at a salary of up to £15 per week. Previous experience in the building industry is essential. The successful candidate will be required to supervise the construction of Council houses, flats and other municipal buildings by contract.

The Council is unable to assist with housing accommodation.

Applications on forms obtainable from the Borough Engineer and Surveyor, 88 Lampton-road, Hounslow, must be returned to him not later than noon on 15th AUGUST, 1960, appropriately endorsed.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow,
Middlesex.

WARWICKSHIRE
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

(A) DEPUTY GROUP ARCHITECTS (TWO), GRADE A.P.T. IV-V (£1,065-£1,375).

Applications are invited from qualified and experienced architects for these posts, which are for the groups handling projects for the Council's education building programme.

In each case the post is one of responsibility requiring a high degree of initiative and design ability in up-to-date forms of construction, use of materials, control of costs, job planning and organisation.

The successful applicant will also be expected to deputise generally for the group architect.

(B) ARCHITECTS, SPECIAL GRADE (£785-£1,070).

Applications are invited from architects who have passed Part I and II of the R.I.B.A. final or special examination or their equivalent at one of the recognised schools of architecture. The uccessful applicants will work in groups on large projects, and an opportunity will be given to men with enthusiasm and ability to design and carry out projects under a group architect.

(C) ARCHITECTURAL ASSISTANTS GRADE A.P.T. II (£765-£880).

Vacancies exist for assistants who are up to intermediate R.I.B.A. standard and who require experience in a variety of interesting projects.

The commencing salary can be within the grade according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Application forms and full conditions applicable to the appointments can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
July, 1960.

DEWSBURY
COUNTY BOROUGH.

BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments within the scope of the grades stated:

(a) PRINCIPAL ASSISTANT ARCHITECT (Housing and General Section), A.P.T. Grade V (£1,220-£1,375 p.a.). Applicants should be A.R.I.B.A.

(b) QUANTITY SURVEYING ASSISTANT, A.P.T. Grade I (£610-£765 p.a.).

Housing accommodation may be made available if required. The appointments will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Acts.

Applications stating age, education, qualifications, full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than MONDAY, 29th AUGUST, 1960, in envelopes endorsed "Appointment of . . . ."

A. NORMAN JAMES,
Town Clerk.

Town Hall,
Dewsbury
27th July, 1960.

LONDON
COUNTY COUNCIL.

STRUCTURAL ENGINEERS.

Required in Architect's Department, L.C.C., salary up to £1,250, in:—

(a) STRUCTURAL ENGINEERING DIVISION. Extensive programme includes multi-storey flats, schools, offices, warehouses and other buildings.

(b) STRUCTURAL ENGINEERING DIVISION. To deal with applications in respect of special structures under Part IV of the London Building Act (A) Act, 1939, and the constructional By-laws. Interesting work involving consideration of unconventional forms of construction.

(c) DISTRICT SURVEYORS' SERVICE. Work mainly outside involving negotiations with architects, engineers and surveyors and supervision of works in progress.

Good prospects in all these aspects of the Council's work.

Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/B/1638/8A), County Hall, S.E.1.

LONDON
COUNTY COUNCIL.

BUILDING SURVEYORS.

Architect's Department, L.C.C., has vacancies in Building Regulation Division and District Surveyors' Service for work in connection with applications under the London Building Acts and Byelaws. District Surveyors' offices are located in Metropolitan Boroughs and work involves negotiations with developers and supervision of works in progress.

Up to £1,250, commencing according to qualifications and experience. Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/B/1637/8A), County Hall, S.E.1.

SOUTH-EASTERN
ELECTRICITY BOARD.

ARCHITECTURAL ASSISTANT, Surrey area. Salary £1,150—£1,240 p.a. in accordance with N.J.C. Grade VI. Superannuable. Applications are invited from suitably qualified architects for the post of ARCHITECTURAL ASSISTANT at Surrey Area Headquarters, Rough Rew, Ridgeway-road, Dorking. The successful applicant will be required to assist the Surrey Building Superintendent in general architectural work connected with the Board's showrooms, offices, depots and other buildings (including the preparation of specifications).

Applications, quoting BLDR and naming two referees, on forms from the Surrey Manager, Seeboard, Rough Rew, Ridgeway-road, Dorking, Surrey, by 24th AUGUST, 1960.

GEORGE WRAY,
Secretary.

THE SOUTH WALES ELECTRICITY BOARD

ARCHITECTURAL ASSISTANTS

Applications are invited for three vacancies in the Chief Engineer's Department at Head Office, St. Mellons.

These opportunities will be of particular interest to candidates seeking to widen their experience in an expanding Industry.

One Section Leader (Architectural Assistant)—salary within the scale £1,005/£1,245 per annum with a minimum starting salary of £1,115 per annum.

Two Senior Architectural Assistants—salary within the scale £780/£1,015 per annum with a minimum starting salary of £890 per annum.

Preference will be given to candidates of Intermediate R.I.B.A. standard.

Conditions of service are excellent with generous holiday allowances and possibility of further assistance towards studying. The posts are superannuable and arrangements for the transfer of present superannuation rights are possible for those joining from Public Utilities, Local Authorities etc.

Please send full details regarding your age, present position, present salary, qualifications and experience to the undersigned at St. Mellons, Cardiff, so as to arrive not later than 26th August, 1960. Quote reference 137/60/B.

Envelopes should be endorsed "Architectural Assistants".

R. G. WILLIAMS,
Secretary.

ROCHESTER CITY

ARCHITECTURAL ASSISTANT, GRADE A.P.T. I.

Applications are invited for the above appointment in the City Surveyor's Department.

Minimum qualification—Intermediate R.I.B.A. or equivalent standard. Commencing salary according to qualifications and experience.

Housing accommodation available if required.

Approved removal expenses paid after one year in appointment.

Applications, stating age, training, qualifications, present and previous appointments and experience, together with the names and addresses of two persons to whom reference may be made, should be delivered to J. A. Peel, A.M.I.C.E., M.I.Mun.E., City Surveyor, 66 Maidstone-road, Rochester, not later than TUESDAY, 30th AUGUST, 1960.

PHILIP H. BARTLETT,
Town Clerk.

Guildhall,
Rochester.
27th July, 1960.

MANCHESTER
REGIONAL HOSPITAL BOARD

invite applications for the post of GENERAL ADMINISTRATIVE ASSISTANT in the Architectural Department at a salary of £770 rising to £1,020 a year. National Health Service conditions and superannuation. Experience in the work of a technical department would be desirable. Application forms obtainable from the Secretary of the Board, Cheetwood-road, Manchester, 8, to whom they should be returned by 31st AUGUST, 1960.

EAST SUSSEX
COUNTY COUNCIL.

Applications are invited for the appointment of an ASSISTANT ARCHITECT, Special Grade, £785-£1,070, on the permanent staff of the Architect's Department.

Applications, giving the names of two persons to whom reference may be made to be sent to the County Architect, County Hall, Lewes, by the 26th AUGUST, 1960.

WILLESDEN
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments in the Building Surveyor's Section:

(a) GENERAL ASSISTANTS (2 posts) within Grade A.P.T. II (£765-£880 p.a.).

(b) GENERAL ASSISTANT, within Grade A.P.T. I (£610-£765 p.a.).

London Weighting is payable in addition to both above salaries.

Applicants should have passed the Intermediate Examination of the Royal Institute of Chartered Surveyors or equivalent and have had experience in the general work of a Building Surveyor's Office and the administration of Building By-laws and the Town Planning Acts.

For one of the (a) posts experience of dealing with the control of advertisements will be an advantage.

The Council are unable to assist with housing accommodation.

Details and form of application obtainable from the Borough Engineer, Town Hall, Dyne-road, Kilburn, N.W.6, and must be returned by 10 a.m. on THURSDAY, 1st SEPTEMBER, 1960.

ROTHERHAM
COUNTY BOROUGH.

ARCHITECTS.

Applications are invited for ARCHITECTURAL ASSISTANTS, A.P.T. I (£610-£765) to Special Grade (£785-£1,070).

The department has a varied and interesting programme of architectural work and candidates are required to have passed Parts I and II of the R.I.B.A. final examination. The commencing salary in the grades will be according to capabilities and experience.

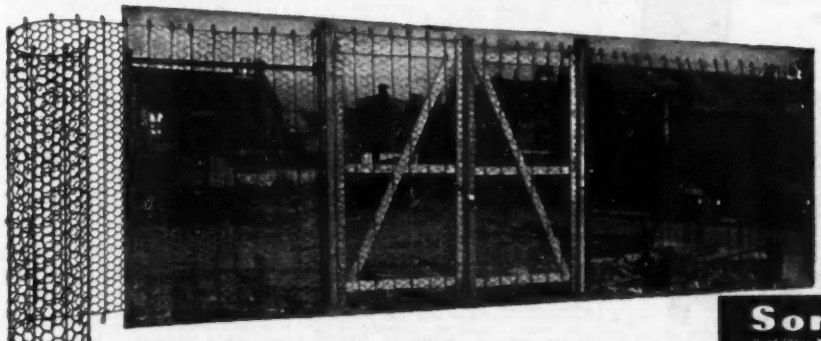
Applications to be endorsed "Architects," stating age, qualifications and details of experience, together with names of two referees should be received by me not later than FRIDAY, 26th AUGUST, 1960.

Canvassing will disqualify.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
28th July, 1960.

THE SOMMERFELD TRACK type PORTABLE FENCING



FOR BUILDING SITES

Most contractors are familiar with the economies obtained by using Sommerfeld Track for fencing building sites, etc. This newly manufactured track from new 3 in. galvanised 12/13 g. wire netting, is reinforced to Sommerfeld patent with ⅝ in. round mild steel bars, looped top and bottom. It is specially designed to meet your requirements and being light in weight can be rolled up and out into a fence in a matter of minutes; what is more, it is quite portable

Each Roll 20 yards long. 8ft. high £17.10.0 10ft. high £19.0.0

Sommerfelds Ltd.
Head Office WELLINGTON SHROPSHIRE ENGLAND Tel Wellington 1000
London Office 167 VICTORIA STREET LONDON S.W.1 Tel Victoria 1000

BUILDING CLERKS OF WORKS

are required by

MINISTRY OF WORKS in ENGLAND and WALES

London commencing salary normally £772 per annum, aged 28 or over, rising to £900 after four years, Outside London slightly less. Exceptionally well-qualified men may be paid a higher commencing salary. Prospects of promotion to posts with salaries of £1,065 and above.

Five-day week. 3½ weeks' annual leave. Opportunities for permanent posts with a non-contributory pension scheme and of service overseas.

Applicants must possess the O.N.C. Building, or a Final City and Guilds Certificate in a craft, or an equivalent qualification, and have had at least three years' supervisory experience on large-scale building sites.

APPLICATIONS :— send postcard for further details and application form to :—

Chief Works Engineer
Ministry of Works,
Room 205, Cleland House,
Page Street,
London, S.W.1.

LONDON
COUNTY COUNCIL.

CONSTRUCTIONAL FOREMEN

Required by L.C.C. for new building and modernisation and conversion by direct labour. Salary, according to qualifications and experience, within range £655 and £835, plus bonus. Stamp to Director of Housing (G B/2071/8), County Hall, S.E.1, for form.

CHATHAM
BOROUGH.

Applications are invited for :
(a) JUNIOR ENGINEERING ASSISTANT (within A.P.T. II, £765-£880).
(b) ARCHITECTURAL DRAUGHTSMAN (within General Division, £210-£595, or Grade A.P.T. I, £610-£765), according to age and experience.

Applicants for (a) should have been trained in a Municipal Engineer's office, and housing accommodation will be made available in an appropriate case.

Applications with copies of two testimonials, or the names and addresses of two referees, should be delivered to the Borough Engineer and Surveyor, Town Hall, Chatham, not later than SATURDAY, 27th AUGUST, 1960.

The appointment will be :
(a) in accordance with the National Scheme of Conditions of Service ;
(b) terminable by one month's notice on either side ;
(c) superannuable, subject to satisfactory medical report.

In accordance with their usual practice the Council will require the successful candidate to give an undertaking to remain in the Council's service for two years.

ROWLAND NEWNES,
Town Clerk.

Town Hall,
Chatham.
11th August, 1960.

WILLESDEN
BOROUGH.

Applications are invited for the following permanent appointments :
(a) ASSISTANT ARCHITECT, within Grade A.P.T. IV (£1,065-£1,220 p.a.).
(b) ASSISTANT ARCHITECT, within Special Grade (£785-£1,070 p.a.).
(c) ARCHITECTURAL ASSISTANT, within Grade A.P.T. II (£765-£880 p.a.).
(d) ARCHITECTURAL ASSISTANT, within Grade A.P.T. I (£610-£765 p.a.).

London Weighting is payable in addition to the above salaries.

Candidates for posts (a) and (b) must be Associates of the R.I.B.A. and should have a high ability in design, capable of supervising contracts and experience of multi-storey flats.

For one post experience of redevelopment schemes will be an advantage.

Candidates for posts (c) and (d) should have passed the Intermediate Examination of the R.I.B.A.

A programme of interesting and varied works is expected to continue for many years and opportunities are offered to imaginative designers of any age with a contemporary and practical outlook.

The appointments will be superannuable and subject to the National Conditions of Service.

The Council is unable to assist with housing accommodation.

Forms of application and conditions of appointment may be obtained from the Borough Engineer and Surveyor, Town Hall, Dyne-road, Kilburn, N.W.6.

Applications to be returned to the undersigned not later than 10 a.m. on THURSDAY, 1st SEPTEMBER, 1960.

(signed) R. S. FORSTER,
Town Clerk.

ROTHERHAM
COUNTY BOROUGH.

CLERK OF WORKS.

Applications are invited for the appointment of a CLERK OF WORKS at a salary of £825 per annum.

Applicants must have had practical experience in the building trade and preferably with knowledge of supervision of contracts.

Write, stating age and experience, together with the names of two referees to the Borough Engineer, Municipal Offices, Rotherham, not later than FRIDAY, 26th AUGUST, 1960.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
28th July, 1960.

WORCESTER CITY.

APPOINTMENT OF TEMPORARY CLERK OF WORKS—HOUSING.

Applications are invited from men with considerable experience in the building trade for this temporary appointment within A.P.T. Grade II (Salary £765-£880).

The successful candidate will be required to assist in the supervision of housebuilding contracts in various parts of the City.

The appointment, which is superannuable, is expected to last at least 3 years and is subject to a medical examination.

Applications, stating age, qualifications and experience, and giving the names of two referees, are to be sent to the City Engineer and Surveyor, 22 Bridge-street, Worcester, not later than the 24th AUGUST, 1960.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester.

MANCHESTER CITY
HOUSING COMMITTEE.

Applications are invited (returnable by 26th AUGUST, 1960) for the undermentioned appointment :

DEPUTY CHIEF ASSISTANT ARCHITECT, J.N.C. "B," £1,260-£1,485 p.a.

Application forms and details of conditions of the appointment obtainable from the Director of Housing, Town Hall, Manchester, 2.

ADMIRALTY

TEMPORARY ASSISTANT ARCHITECTS (BASIC GRADE).

ASSISTANT ARCHITECTS required in newly formed Architect's Branch of Navy Works Department of Admiralty at Headquarters (Pinner, Middlesex). Duties embrace design of sleeping, messing and recreation buildings for single officers and men, houses, flats and housing estates, instructional buildings, office blocks, hospitals and industrial buildings. Assistant Architects at Headquarters work under control of main grade and/or Senior Architects and expected to lead group of Architectural Assistants. Qualifications : A.R.I.B.A. Must be British subjects with first-class design ability and sound working knowledge of up-to-date forms of construction, materials and costs. Scope for development and application of new ideas in design of Naval buildings. Posts in basic grade with salaries starting from £830 per annum (London Rate) at age 25 to £1,125 per annum (London Rate) at age 34 or over. Maximum of London Scale is £1,300 p.a. Posts offered are non-pensionable with opportunities for establishment promotion to main grade (salary maximum £1,730 National Rate) and higher posts. Five-day week. Annual Leave allowance 22 days, rising to 25 days after 10 years' and 30 days after 20 years' service. Forms quoting reference J.275/OA from Ministry of Labour, Technical and Scientific Register (K), Almack House, 26 King-street, London, S.W.1.

TAMWORTH
BOROUGH.

CLERK OF WORKS AND BUILDING INSPECTOR.

Applications are invited for the above appointment at a wage of £15 per week. Candidates should have had experience in the supervision of the construction of roads, sewers and the erection of houses and general estate development of a major character, and should be capable of setting out works, levelling, measuring for certificates and settling final accounts. Previous experience of similar work is essential. Applicants will be expected to carry out the duties of Building Inspector under the Building Byelaws.

A house will be available for the successful applicant.

Applications giving age and experience together with the names of three referees should reach the undersigned not later than 18th AUGUST, 1960.

H. B. LEAKE,
Town Clerk.

Municipal Offices,
Tamworth,
29th July, 1960.

SOUTH SHIELDS
COUNTY BOROUGH.

PRINCIPAL ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the above appointment in the Borough Engineer's Department. Applicants must be suitably qualified and the salary paid will be in accordance with Grade A.P.T. V (£1,220-£1,375).

Housing accommodation will be made available to successful applicant if necessary and he will be required to pass a medical examination for Superanuation purposes.

Application forms are obtainable from the Borough Engineer, Town Hall, South Shields, and should be returned to him not later than 10 a.m., MONDAY, 19th SEPTEMBER, 1960.

R. S. YOUNG,
Town Clerk.

LONDON
CORPORATION.

Applications are invited for temporary appointments in the City Engineer's Department :—

ASSISTANT SITE ARCHITECT, £1,325 per annum ;

ASSISTANT ARCHITECT, £1,120 per annum ;

in connection with the construction under contract of a large municipal building ; for the duration of the works estimated at 2½ years.

Candidates should be Corporate Members of the R.I.B.A. and have had good general experience in preparation of working detail and site supervision.

Applications, stating age, appointments held and experience, together with names of two referees, to The City Engineer, Guildhall, London, E.C.2, by 29th AUGUST, 1960.

SOUTH MANCHESTER
HOSPITAL MANAGEMENT COMMITTEE.

Applications are invited for the post of TECHNICAL ASSISTANT to the Superintendent Engineer and Building Supervisor from persons having knowledge of the Building Trades. Candidates should be able to prepare drawings and tracings for minor works, prepare schedules of maintenance work, and assist in the preparation of specifications and estimates. Possession of the Ordinary National Certificate would be an advantage. Salary scale £415 at 21 years to £525 at 26 years and over x £25(4)-£625 p.a. Superannuation contributions payable. Applications stating age, qualifications and experience, together with the names of two referees should be submitted to the Group Secretary, Withington Hospital, Manchester, 20.

STEVENAGE
URBAN DISTRICT COUNCIL.

ENGINEERING ASSISTANT, GRADE A.P.T. IV (£1,065-£1,220).

Applications are invited for the above appointment in the Engineer and Surveyor's Department.

Candidates must possess a suitable professional qualification, have a sound experience of the design and construction of buildings and of valuations for house purchase. Preference will be given to those who have passed the Final Examination of the Royal Institution of Chartered Surveyors.

Commencing salary according to age, experience and qualification. Housing accommodation will be provided if required and a "casual user" car allowance will be paid.

The appointment will be subject to the Local Government Superannuation Acts and to the passing of a medical examination. The appointment is terminable by one month's notice on either side.

Applications stating age, past and present appointments, qualifications and experience, together with the names of two referees must reach the undersigned not later than 22nd AUGUST, 1960.

E. J. BOWERS,
Clerk of the Council.

Council Offices,
Orchard-road,
Stevenage,
Herts.
26th July, 1960.

BRECONSHIRE
COUNTY COUNCIL.

Applications are invited for the established appointment of DRAUGHTSMAN in the County Planning Department. Applicants should have considerable drawing office experience and be neat and expeditious draughtsmen capable of collecting and interpreting information for planning surveys from various sources. Salary within General Division of National Scales, ranging from £210 to £465 or £595 per annum, depending on experience and qualifications. The appointment is subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, the passing of a medical examination and one month's notice on either side. Applicants must state whether to their knowledge they are related to any member or senior officer of the Council. Applications, stating age, qualifications, present appointment and previous experience, with the names and addresses of two referees, must be received by the undersigned not later than 31st AUGUST, 1960.

C. M. S. WELLS,
Clerk of the County Council.

County Hall,
Brecon.

BEDFORDSHIRE
COUNTY COUNCIL.

Applications are invited from Associates of the Royal Institute of Chartered Surveyors for appointments of SENIOR QUANTITY SURVEYORS, Grade A.P.T. V (£1,220-£1,375) and A.P.T. IV (£1,065-£1,220).

Suitable candidates will be appointed to Grades and points within Grades according to experience.

Application forms obtained from the County Architect, Shire Hall, Bedford, to be returned within fourteen days of the appearance of this advertisement.

HALIFAX
COUNTY BOROUGH.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the appointment of SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (two appointments). Salary £1,065-£1,220, in the Education Section. Applications, stating age, education and training, qualifications, present and past appointments (with dates and salaries) and experience along with the names and addresses of two persons to whom reference may be made, should be delivered to the undersigned not later than SATURDAY, 27th AUGUST. Provision of Housing Accommodation will be considered for the successful applicants.

RICHARD DE Z. HALL,
Town Clerk.

Town Hall,
Halifax.

SOUTHAMPTON
COUNTY BOROUGH.

Applications are invited for the following appointments :
(a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. V (£1,220-£1,375), for duties in connection with an extensive and varied programme of housing development including multi-storey flats. Applicants must hold the qualification A.R.I.B.A. with wide experience in the design and administration of major building works.
(b) ASSISTANT ARCHITECT, Grade A.P.T. III-IV (£880-£1,220), for duties in connection with housing estate development. Applicants must have passed Parts I and II of the R.I.B.A. final examination. Commencing salary according to experience and qualifications.

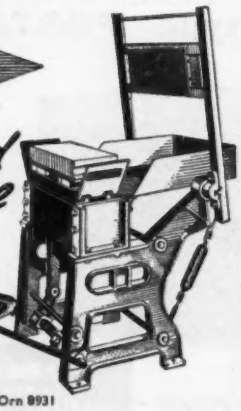
The appointments are subject to N.J.C. conditions of service.

Housing accommodation available in approved cases and approved removal expenses reimbursable up to a maximum of £50.

Apply on application forms obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, returnable by MONDAY, 29th AUGUST, 1960.

LINER

Slab Block and Brick Machine



Makes Plain Slabs, Grooved, or Tongued and Grooved Slabs, Frogged or Plain Bricks, Rock Faced and other Building Blocks. Hand Tamping unnecessary. Fast in operation. Needs only wood pallets.

Write for Illustrated Brochure.

H.P. TERMS—ONLY 10% Deposit.

The LINER CONCRETE MACHINERY Co. Ltd.
70 Park Road, Gateshead 8
Phone: 72501 Grams: "Liner, Gateshead"
London Office and Showrooms:
Liner House, Laxdon Rd., Acton, W.3. Tel.: ACOrn 8931

LEEDS CITY

WORKS DEPARTMENT.

Applications are invited for the following posts:

(a) SENIOR TECHNICAL ASSISTANT, Grade A.P.T. IV (£1,065-£1,220).

(b) TECHNICAL ASSISTANT (Conversions), Grade A.P.T. III (£880-£1,065)—two vacancies.

(c) SENIOR QUANTITY SURVEYOR, Grade A.P.T. III (£880-£1,065).

(d) ESTIMATOR, Grade A.P.T. III (£880-£1,065).

(e) DRAUGHTSMAN, Grade A.P.T. II (£765-£880)—two vacancies.

(f) ESTIMATING ASSISTANT, Grade A.P.T. II (£765-£580)

(g) TECHNICAL ASSISTANT (Conversions), Grade A.P.T. I (£610-£765)—three vacancies.

(h) ESTIMATING ASSISTANT, Grade A.P.T. I (£610-£765).

Applicants for:

(a) will be required to take charge of the Drawing Office handling works of alteration and conversion of Corporation properties, particularly those on large scale conversions of houses into flats and improvements of back to back properties, seeking Ministry approvals thereto, etc.;

(b) will be required to handle in their entirety conversion schemes, vetting of properties, preparation of drawings and specifications;

(c) must be experienced in the preparation and pricing of bills of quantities, obtaining particulars and preparing specifications and detailed estimates, site measurement, valuation of works in progress and settlement of final accounts.

(d) experienced in preparation of specifications and detailed estimates for large scale flat conversions, and improvements to housing properties, including dilapidations, site measuring, valuations and final accounts;

(e) should be experienced in carrying out detailed surveys of existing buildings, levelling and the preparation of working drawings for adaptations, alterations and improvements of Corporation properties generally;

(f) as for (d), but working under supervision;

(g) will be required to carry out all preparatory surveying and other work in connection with properties for conversion, and be capable of producing detailed drawings of properties as existing;

(h) will require good knowledge of building construction, specifications and estimating to assist foregoing officers.

A recognised qualification consistent with the appointment would be advantageous.

The appointments are superannuable; medical examination. Forms of application from the Director of Works, Sweet-street, Leeds, 11, returnable not later than 31st AUGUST, 1960.

KENT
COUNTY COUNCIL.

ARCHITECTS are required in the office of the County Architect to assist with the Council's expanding building programme which includes schools, colleges, residential homes and other public buildings. The salary range extends to £1,375 a year, the starting grade and salary depending on qualifications, ability and experience.

Application forms and further details from the County Architect, Springfield, Maidstone. Closing date 30th AUGUST, 1960.

WILTSHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Wiltshire has a large and expanding building programme and it has been decided to recruit a new group who will deal with all types of County projects.

There is considerable scope for imaginative design and opportunity for acquiring experience in a progressive office with good working conditions.

Applications are invited for the following posts:—

GROUP LEADER, Scale "B," £1,285-£1,485.

ASSISTANT ARCHITECT, A.P.T. IV, £1,065-£1,220.

ASSISTANT ARCHITECTS, A.P.T. III, £880-£1,065.

ARCHITECTURAL ASSISTANTS, Special, £785-£1,070.

ARCHITECTURAL ASSISTANTS, A.P.T. I and II, £610-£880.

ARCHITECTURAL DRAUGHTSMEN, Miscellaneous Division, £590-£650.

An applicant for the post of Group Leader must be an Associate of the Royal Institute of British Architects and have had at least five years' experience on major projects. Preference given to qualified Architects for the posts graded A.P.T. III and IV and to assistants undertaking a course of study leading to qualification for the remaining posts. Day release may be considered in certain circumstances. Previous Local Government experience is not essential.

The appointments are subject to medical examination, the National Scheme of Conditions of Service and the provisions of the Local Government Superannuation Acts 1937-53, and determinable by one month's notice in writing on either side. Alternative Saturday mornings are free and canteen facilities available.

Applications should be submitted on forms to be obtained from the County Architect. Completed forms, accompanied with the names and addresses of three referees should be returned to the Clerk of the County Council, County Hall, Trowbridge, WITHIN 14 DAYS after the appearance of this advertisement.

ST. HELENS
COUNTY BOROUGH.

APPOINTMENT OF BUILDING INSPECTORS.

Applications are invited for the following posts in the Borough Engineer's Department:—

(A) SENIOR DISTRICT BUILDING INSPECTOR, A.P.T. II (£765-£880).

(B) DISTRICT BUILDING INSPECTOR, A.P.T. I (£610-£765).

Applicants should have a sound knowledge of Building Construction and Sanitation, the administration of Building Bye-Laws and have experience in carrying out inspections of building works in progress.

Additionally applicants for post (A) should possess the Building Inspectors Certificate of the Institution of Municipal Engineers or be similarly qualified and be experienced in the examination of plans submitted under the Building Bye-Laws.

The appointments are subject to the provisions of the Local Government Superannuation Acts, N.J.C. Conditions of Service, a medical examination and will be terminable by one month's notice on either side.

A five-day week is operated.

Applications, stating clearly the post applied for and giving names and addresses of two referees, are to be submitted to the undersigned not later than TUESDAY, 23rd AUGUST, 1960.

Applicants must reveal relationship to any member or senior officer of the Council.

Canvassing will disqualify.

M. WARD,
M.I.Mun.E., A.M.I.Struct.E.,
Borough Engineer and Surveyor.

Town Hall,
St. Helens.

AIR MINISTRY

Works Design Branch requires in London CIVIL ENGINERING DESIGNER DRAUGHTSMEN with adequate training and drawing office experience in one or more of the following:

(a) Roads, pavements, earthworks and stormwater drainage.

(b) Foul drainage and sewage disposal.

(c) Water supply and distribution.

Some site experience and possession of recognised technical qualification an advantage. Financial assistance and time off may be allowed for recognised courses of study. Promotion and pension prospects. Five-day week with 18 days' paid leave per year initially. Salary ranges from £680 (at age 25) to £900 p.a. Commencing salary dependent on age, qualifications and experience. Applicants, who must be natural born British subjects, should write to Air Ministry, W.G.d., Lacon House, Theobalds-road, London, W.C.1, or apply to any Employment Exchange quoting Kings Cross 3746, giving age, details of training, qualifications, full particulars of former posts held and copies of any testimonials. Candidates selected will normally be interviewed in London and certain expenses reimbursed.

HUYTON-WITH-ROBY
URBAN DISTRICT COUNCIL.

ARCHITECTURAL AND HOUSING DEPARTMENT.

Applications are invited for posts in the above Department as follows:—

(a) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,065-£1,220).

(b) ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£765-£880).

Candidates for post (a) should be associate members of the R.I.B.A., and candidates for post (b) should have passed the Intermediate Examination of the R.I.B.A.

The work of the Department consists of a large Housing and Capital Works programme.

The appointments will be subject to the Local Government Superannuation Acts and the National Conditions of Service, and will be terminable by one calendar month's notice in writing on either side.

Applications, stating age, qualifications and experience, together with the names of two persons to whom reference can be made, should reach R. T. Chappelle, A.R.I.B.A., Architect and Housing Director, Archway-road, Huyton, not later than 22nd AUGUST, 1960.

Canvassing disqualifies.

D. WILLGOOSE,
Clerk of the Council.

Council Offices,
Derby-road,
Huyton.

BRANDON
AND BYSHOTTLES
URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT in the Architect's Department on the salary scale A.P.T. I (£610-£765). The appointment will be subject to the National Scheme of Conditions of Service and Council Regulations. (Five-day week is in operation). One month's notice is required on either side. Forms of application can be obtained from the undersigned and should be returned not later than MONDAY, 29th AUGUST 1960.

A. A. LUXMOORE,
Clerk of the Council

Browney House,
Browney Colliery,
Durham.
2nd August, 1960.

BRACKNELL DEVELOPMENT CORPORATION

Applications are invited for the following appointments:—

(a) SENIOR ARCHITECT

Grade VIII (£1392 x £57(4)—£1620)

The development of the New Town of Bracknell, begun in 1950, is now in a very interesting stage, and a Senior Architect is required to take charge of planning aspects, under the Chief Architect, and to work out in detail important central areas of the present Master Plan and probably to plan the extension of the Designated Area from 1,850 to 3,050 acres and the population from 25,000 to 40,000, regarding which the Minister is in statutory consultation with the County and Local Authorities.

Applicants should be Corporate Members of the R.I.B.A. and the T.P.I. with a high degree of skill in the following duties:—

(a) the preparation of Central Area and Neighbourhood plans.

(b) the examination of planning applications, in conjunction with County and Local Authorities, and giving evidence at Inquiries.

(c) the preparation of preliminary housing layouts and basic house design.

The post offers considerable scope in a variety of interesting work.

(b) ASSISTANT ARCHITECTS

(2)—Grade IV (£1065 x £55 x £50(2)—£1220)

Applicants should be Corporate Members of the R.I.B.A. and will be required to assist with the above planning and in the general work of the Department.

Superannuation schemes, medical examination. Good housing accommodation available for each post.

Applications, stating the post applied for and giving age, education, qualifications, experience and appointments held (with dates and salaries) should be addressed to the

General Manager (A),
Bracknell Development Corporation,
Farley Hall, Bracknell, Berks,

to be received not later than the 31st August 1960.

KING'S LYNN
BOROUGH.

APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the above appointment. Salary within Grades A.P.T. II-III (£765-£1,065). Housing accommodation provided. Removal expenses paid.

Further particulars may be obtained from G. Holmes, A.R.I.B.A., Housing Architect, Clifton House, Queen-street, King's Lynn.

Closing date, 30th AUGUST, 1960.

E. W. GOCHER,
Town Clerk.

Town Hall,
King's Lynn,
Norfolk.

BLACKPOOL
COUNTY BOROUGH.

Applications invited for:

ARCHITECTURAL ASSISTANT, A.P.T. I (£610-£765).

Forms, etc., from Arthur Hamilton, B.Sc., A.R.I.B.A. (Borough Surveyor), P.O. Box 17, Municipal Offices, Blackpool.

LOUGHBOROUGH
BOROUGH.

QUANTITY SURVEYOR.

Applications are invited for the above permanent appointment in the Borough Surveyor's Department to assist in measuring up and examining builders' final accounts for housing contracts. Experience in Taking Off and billing will also be an advantage.

Applicants should have a good knowledge of quantities and costings, and have either held a similar appointment or had previous experience in a builder's office.

The salary will be in accordance with Grade A.P.T. I of the National Scale of Salaries (£610-£765).

Applications, stating age, present position, salary and experience, together with the names and addresses of two referees, should reach the undersigned not later than FIRST POST on THURSDAY, 1st SEPTEMBER, 1960.

The appointment will be subject to superannuation and to a medical examination.

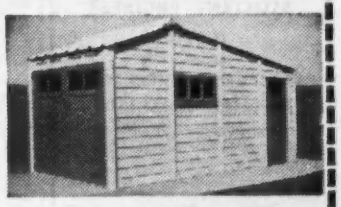
Housing accommodation will be made available if required.

ARTHUR USHER,
Town Clerk.

Southfields,
Loughborough.
5th August, 1960.

PREFABRICATED FOR EVERY PURPOSE

Consider Prefabricated Concrete for whatever outbuilding you want to erect. A Pavilion, a Factory, a School Annexe, a Scouts Hut, an Assembly Hall or a Private House Garage or 'Multiple' for a Housing Estate. Then contact ALBOROUGH for plans, specifications and prices—also for details of our Complete Erection Service within 75 miles of London. Alborough Prefabricated Concrete structures are the answer to every outbuilding requirement — satisfying cost, speed, convenience, appearance and long service.



you buy superb quality with Alborough

A.B.C.D. (Raynes Park) LTD.
34/35 Alpha Road, Surbiton Surrey.
Tel.: ELMbridge 6591/3

Write off to-day for illustrated literature dealing with your interest in Prefabricated Concrete.

COUNTY BOROUGH OF SOUTHEND-ON-SEA

BOROUGH ARCHITECT'S DEPARTMENT

ASSISTANT ARCHITECTS

A house will be available and removal expenses paid to **Assistant Architects** with initiative and enthusiasm to be appointed according to experience within grades A.P.T. III to V (£880—£1,375).

Applications with usual particulars and the names of referees should be sent to the Borough Architect, 30, Alexandra Street Southend-on-Sea, by Monday, 29th August, 1960.

ARCHIBALD GLEN, TOWN CLERK.

CUMBERLAND
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT COUNTY ARCHITECT (DESIGN) at a salary within J.N.C. Scale A (£1,260 x £50(2) x £30-£1,390). Essential User Grade C travelling allowance. Housing accommodation is available.

Applicants must be A.R.I.B.A.—this is an excellent opportunity for a young Architect with a flair for design.

Further details and application forms, to be returned not later than MONDAY, 22nd AUGUST, 1960, may be obtained from the Acting County Architect, 15 Portland Square, Carlisle. The successful applicant will be required to take up his duties as soon as possible.

G. N. C. SWIFT,
Clerk of the County Council.

WREXHAM
BOROUGH.

Applications are invited for the following appointments:—

(a) TWO ENGINEERING ASSISTANTS, salary A.P.T. Grade IV (range £1,065-£1,220 per annum).

(b) TWO ARCHITECTURAL ASSISTANTS, salary Special Grade (range £785-£1,070 per annum).

Candidates should have passed the final examination of the Institution of Civil or Municipal Engineers or of the R.I.B.A., as appropriate, and have had experience with a Municipal Authority.

Casual car allowance will be paid on the instructions of the Borough Surveyor and the Council will consider payment of removal expenses.

Housing accommodation provided if required.

Forms of application and particulars of duties and works in hand obtainable from the Borough Surveyor, 31 Chester-street, Wrexham.

Applications to be returned to the undersigned by not later than 12 NOON, 22nd AUGUST, 1960.

PHILIP J. WALTERS,
Town Clerk.

Guildhall,
Wrexham.
July, 1960.

CENTRAL ELECTRICITY GENERATING BOARD

NORTHERN PROJECT GROUP

THIRD ASSISTANT ENGINEER (CIVIL)

required at

PROJECT GROUP HEADQUARTERS AGECROFT, MANCHESTER

Salary range £1,285—£1,610 per annum.

Applicants should be competent Quantity Surveyors with experience in taking-off, billing, site measurement and agreement of final certificates for power stations or similar works. Membership or qualification leading to membership, of an appropriate professional institution will be an advantage. Application forms available from Administrative Officer, Central Electricity Generating Board, Northern Project Group, Agecroft Road, Pendlebury, Swinton, Manchester, to be returned by 23rd August, 1960, Quoting Reference N57/B.

CAMBRIDGE
UNIVERSITY.

ASSISTANT LECTURER IN ARCHITECTURE.

Applications are invited for the post of ASSISTANT LECTURER in the School of Architecture from 1st January, 1961. The duties will consist mainly of instruction in the studios.

Particulars may be obtained from the Secretary of the Appointments Committee of the Faculty of Fine Arts, 1 Scroope-terrace, Cambridge. Applications should be submitted by 10th SEPTEMBER, 1960.

28th July, 1960.

WILLESDEN
BOROUGH.

Applications are invited for the appointment in the Building Works Section of the Borough Engineer and Surveyor's Department of INCENTIVES OFFICER. Salary within Grade A.P.T. II (£765-£880 p.a.) plus London Weighting.

There is no age limit but candidates should have had experience in Bonus Surveying new buildings including measurement and agreeing targets.

The Council cannot assist with housing.

Further details and application forms obtainable from the Borough Engineer and Surveyor, Town Hall, Dyne-road, Kilburn, N.W.6, to be returned by 10 a.m. on THURSDAY, 1st SEPTEMBER, 1960.

(signed) R. S. FORSTER,
Town Clerk.

BRACKNELL
DEVELOPMENT CORPORATION.

Applications are invited for the followjng posts in the Quantity Surveyor's Section:—

(1) QUANTITY SURVEYOR. Salary range £1,065-£1,220. Candidates must be Corporation Members of the R.I.C.S.

(2) ASSISTANT QUANTITY SURVEYOR. Salary range £765-£880 (preference will be given to candidates who have passed the Intermediate Examination of the R.I.C.S.).

Duties embrace Housing, Town Centre and Industrial buildings. Superannuation schemes, medical examination. Housing available.

Apply by 22nd AUGUST, 1960, stating post applied for and giving age, education and qualifications, experience and appointments held (with dates) and names of two referees, to General Manager (Q.S.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks.

FAREHAM, HAMPSHIRE,
URBAN DISTRICT COUNCIL.

Invites applications for the following posts in the Architects' Section of the Engineer and Surveyor's Department:—

(1) SENIOR ASSISTANT ARCHITECT, Special Grade (£785-£1,070 per annum), for responsible work of a thoroughly progressive nature. Housing accommodation can be made available if required. Car allowance on Casual User's scale will apply.

(2) JUNIOR ARCHITECTURAL ASSISTANT, General Division (£240-£595 per annum). Suitable for a student wishing to gain useful experience.

Fareham is a lively South Coast town rapidly approaching 60,000 population, with schemes in hand which include a substantial housing programme and possibly an indoor swimming pool.

Please Note:—

N.J.C. Conditions of Service: One month's notice. Superannuation. Medical examination. Salaries commencing at a point on the scale commensurate with age and experience. Further details available on request.

Applications, giving age, full details of education and experience, and the names and addresses of two referees, to me by 3rd SEPTEMBER, 1960.

B. W. RANDS,
Clerk to the Council.

"Merton,"
5 Grove-road,
Fareham,
Hants.

THE NORTH-WESTERN
ELECTRICITY BOARD.

ARCHITECTURAL ASSISTANT. (DESIGNATED AS FOURTH ASSISTANT ENGINEER). ENGINEERING DEPARTMENT AREA BOARD HEADQUARTERS CHEETWOOD-ROAD, MANCHESTER, 8.

Applicants should have passed the Intermediate Examination and be studying for the Final Examination of the Royal Institute of British Architects.

Experience should include design and working drawings for small buildings and detailing for larger buildings.

Salary within range: £855—£1,165 p.a. Grade BX.11. N.J.B. Conditions.

Application forms to be obtained from the Secretary, The North-Western Electricity Board, Cheetwood-road, Manchester, 8, and returned to him by the 22nd AUGUST, 1960.

LEEDS CITY.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited from persons holding appropriate professional qualifications for the following permanent posts:—

(a) ASSISTANT CITY ARCHITECT (HOUSING);

(b) ASSISTANT CITY ARCHITECT (EDUCATION AND GENERAL).

Salary scale £1,790-£2,085 per annum. Grade "F."

The Assistant City Architect (Housing) will be responsible under my control for large house building programmes and should have had a wide experience of all forms of housing layout, comprehensive developments and multi-storey flats.

The Assistant City Architect (Education and General) will be responsible under my control for major educational building projects and large public buildings, e.g., multi-storey college, municipal office block, abattoir, swimming baths, etc.

Both posts carry great responsibilities and offer worthwhile opportunities to those who are keenly interested in design and the planning and organisation of extensive municipal building schemes.

Further details and application forms may be obtained from the undersigned.

Applications are also invited for the following permanent posts in (a) Housing and (b) Education and General sections of the department.

Post No. 1: PRINCIPAL ARCHITECTS. Grade C. Salary Scale £1,385-£1,620.

Post No. 2: ASSISTANT PRINCIPAL ARCHITECTS. Grade B. Salary Scale £1,320-£1,485.

Post No. 3: SENIOR ASSISTANT ARCHITECTS. Grade A.P.T. V. Salary Scale £1,220-£1,375.

Post No. 4: SENIOR ASSISTANT ARCHITECTS. Grade A.P.T. IV. Salary Scale £1,065-£1,220.

Post No. 5: ASSISTANT ARCHITECTS. Grade A.P.T. III. Salary Scale £880-£1,065.

Post No. 6: ARCHITECTURAL ASSISTANTS. Grade A.P.T. II. Salary Scale £765-£880.

Applicants for the senior posts must hold appropriate professional qualifications and should have had a wide experience in either housing, education or other types of large public building work and will be required to design and work on these projects to completion. Applicants will be considered on their capability for design, experience, contemporary outlook and suitability.

The appointments are superannuable—medical examination.

Application forms, obtainable from the undersigned, are to be returned by 12 NOON on MONDAY, 5th SEPTEMBER, 1960.

Canvassing disqualifies.

J. R. SHERIDAN-SHEDDEN,
City Architect.

Priestley House,
Leeds, 9.

BARKING
CORPORATION.

DEPARTMENT OF THE BOROUGH ARCHITECT.

QUANTITY SURVEYING ASSISTANT A.P.T. I (£610—£765 per annum, plus London Weighting £25—£40 per annum.)

Applications are invited for the above POST, and candidates should have had experience in abstracting and billing.

The department has a large amount of work in hand, particularly housing, including multi-storey flats.

Applications, together with the names of two technical referees, should be forwarded to the undersigned not later than FRIDAY, 2nd SEPTEMBER, 1960.

E. R. FARR,
Town Clerk.

Town Hall,
Barking,
Essex.

EAST HAM
COUNTY BOROUGH.

PRINCIPAL ASSISTANT PLANNING OFFICER.—

GRADE A.P.T. IV. £1,065-£1,220.

Vacancy in the Borough Engineer's Department. London Weighting paid in addition. Salary above minimum paid according to qualifications and experience

Subsistence allowance may be paid over a reasonable period to person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Details and application form from the Town Clerk, E.6.

Closing date 26th AUGUST, 1960.

HERTFORDSHIRE
COUNTY COUNCIL.

COUNTY LAND AGENT AND VALUER'S DEPARTMENT.

BUILDING SURVEYOR Required. A.P.T. Grade III (£880-£1,065 per annum).

Candidates must be members of the Royal Institution of Chartered Surveyors or hold an equivalent qualification. Knowledge of the design and maintenance of agricultural buildings would be an advantage.

Car allowance payable. Post pensionable.

Applications, giving age, qualifications and experience, with names of two referees, to County Land Agent and Valuer, County Hall, Hertford, by 29th AUGUST, 1960.

CARLISLE CITY.

APPOINTMENT OF SENIOR ASSISTANT QUANTITY SURVEYOR. A.P.T. IV (£1,065-£1,220).

Applications are invited from Qualified QUANTITY SURVEYORS for the above appointment in the City Surveyor's Office.

Rented housing accommodation will be available to the successful applicant.

Forms of application, returnable not later than 22nd AUGUST, 1960, may be obtained from, and enquiries made to, the City Surveyor, 18 Fisher-street, Carlisle.

H. D. A. ROBERTSON,
Town Clerk.

CAMBRIDGE
UNIVERSITY.

DEPARTMENT OF ESTATE MANAGEMENT.

Applications are invited for the following additional posts in the above Department:—

Heating and Electrical Section

(a) Experienced DRAUGHTSMAN, able to produce working drawings from sketch plans and layouts. Technical knowledge of heating and electrical work desirable, but draughtsmanship will be prime consideration.

(b) JUNIOR ASSISTANT for duties of a general nature. Suitable for young man anxious to continue studies leading to National Certificate or professional qualifications.

Drawing Office

(a) Capable DRAUGHTSMAN, with knowledge of Building Construction, for preparation of working drawings and plans.

(b) TRAINEE DRAUGHTSMAN. This appointment will be suitable for a young man 17-19 years of age who wishes to continue his studies for professional qualifications or City and Guilds certificate.

Quantity Surveyor's Section

ASSISTANT, male or female, with knowledge of Quantity Surveyor's work capable of "Working-up" Bills of Quantities, checking final accounts, etc.

Appointment to the senior posts above may be made either in, or leading to, the University Grade scale £624-£806 p.a.; those to the junior posts will be at commencing wages commensurate with age, education, etc.

Applications, giving educational background, examinations passed, etc., and accompanied where possible by copies of recent testimonials, should be sent to the Chief Clerk, Department of Estate Management, 74 Trumpington-street, Cambridge.

WELSH
REGIONAL HOSPITAL BOARD.

REGIONAL ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts:—

(A) ASSISTANT ARCHITECTS. Applicants must be Registered Architects holding the final examination of the Royal Institute of British Architects, well experienced in design and modern methods of construction, together with practical building experience.

Salary: £905-£1,310.

(B) ARCHITECTURAL ASSISTANTS. Applicants must hold the Intermediate Examination of the Royal Institute of British Architects.

Salary: £625-£900.

(C) ASSISTANT QUANTITY SURVEYORS. Applicants must hold the Final Examination of the Royal Institution of Chartered Surveyors and have a good experience in Taking Off, preparation of Bills of Quantities and estimates, and valuation of works in progress and the settlement of final accounts.

Salary: £905-£1,310.

(D) ARCHITECTURAL DRAUGHTSMAN. Applicants must have had suitable training including 3 years' technical experience in architectural drawing.

Salary: £475-£685.

New entrants to the Health Service will commence at the minimum point of the salary scale. The Board has, however, discretion to fix a starting point at an incremental point above the minimum where it is considered a candidate has relevant practical experience which is appropriate to the post to be filled.

All posts superannuable, five-day week.

Applications to the Secretary, Temple of Peace and Health, Cathays Park, Cardiff, WITHIN 14 DAYS of the appearance of this advertisement, stating qualifications, age, experience, present position and salary and names of two referees.

CUMBERNAULD NEW TOWN

To meet the expanded building programme the following Staff are required urgently in the Department of the Chief Architect and Planning Officer :—

Assistant Quantity Surveyor
One Post
Salary Scale APT.III/IV (£880/£1,220). Commencing salary according to experience.
To be responsible for the preparation of Schedules of Quantities for all trades, Interim Valuations and Final Accounts, under the direction of Senior Assistants, for all types of building projects.
A.R.I.C.S. required.

Apprentice Quantity Surveyor
One Post
Salary Scale General Division (£210/£595) with commencing salary according to age.
The applicant must be a student member of the R.I.C.S. (Quantities Sub-Division) preferably equivalent in experience to a first or second year apprentice.

Arrangements will be made to allow of attendance at appropriate courses (part day and evening).
The Chief Quantity Surveyor is a member of the Royal Institution of Chartered Surveyors and the Office is recognised for examination purposes.
5-day week.
Assistance with housing in appropriate cases.
Local Government Superannuation subject to medical examination.
Application forms which may be obtained from the General Manager, Cumbernauld Development Corporation, Cumbernauld House, Cumbernauld, Glasgow should be returned completed NOT LATER THAN Friday, 27th August, 1960.

WORTHING
BOROUGH.

APPOINTMENT OF SENIOR ASSISTANT ARCHITECT.

Applications are invited for the appointment of an ASSISTANT ARCHITECT in the Borough Engineer's Department on the Special Grade of salaries, i.e. £785-£1,070, commencing salary according to experience.

Candidates must have passed the Final Examination of the R.I.B.A. or its equivalent at a recognised school of architecture, and must have had at least five years' experience including the period spent on theoretical training.

The appointment will be subject to the National Scheme of Conditions of Service of Local Government Officers, to the provisions of the Local Government Superannuation Acts, and to the successful candidate passing satisfactorily a medical examination. The appointment will be terminable by one month's notice on either side.

Applications, stating age, qualifications, experience, present and past appointments, with dates, and accompanied by copies of two recent testimonials, should be submitted to the Borough Engineer and Surveyor, Town Hall, Worthing, not later than the 29th AUGUST, 1960.

ERNEST G. TOWNSEND,
Town Clerk.

EAST HAM
COUNTY BOROUGH.

SENIOR ASSISTANT ARCHITECT. A.P.T. III. SALARY £880-£1,065 PLUS LONDON WEIGHTING.
ARCHITECTURAL ASSISTANTS. A.P.T. I SALARY UP TO £805 PER ANNUM INCLUDING LONDON WEIGHTING.

Subsistence allowances may be granted over a reasonable period to the persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by 26th AUGUST, 1960, from the Town Clerk, Town Hall, East Ham, E.6.

CRANBROOK
RURAL DISTRICT COUNCIL.

ARCHITECTURAL/TECHNICAL ASSISTANT.

Applications are invited for the appointment of ARCHITECTURAL/TECHNICAL ASSISTANT in the Architect's Department of the above Authority at a salary in accordance with A.P.T. Grade II (£765-£880 per annum), to be fixed having regard to the qualifications and experience of the successful candidate.

The appointment is subject to a medical examination and determination by one calendar month's notice on either side.

Applications, stating age, experience, and names and addresses of two referees, must reach the undersigned not later than 3rd SEPTEMBER, 1960.

F. G. BANFIELD,
Clerk to the Council.

Council Offices,
Hill House,
Cranbrook,
Kent.
3rd August, 1960.

COVENTRY
CORPORATION

Require
DEPUTY CHIEF BUILDING SURVEYOR—
A.P.T. IV (£1,065-£1,220), commencing according to qualifications and experience. Candidates must have considerable experience in examination of plans under building byelaws, Public Health and other Statutory Acts, inspection of buildings under construction, Dangerous Structures, and Means of Escape in Case of Fire. Experience in Committee procedure, administration and staff supervision an advantage. Housing accommodation may be available.

Interest-free removal expenses loan (up to £50).

Application forms from City Engineer, Council House, Coventry, returnable by MONDAY, 29th AUGUST, 1960.

TONE VALE
GROUP HOSPITAL COMMITTEE.

WORKS ASSISTANT.

There is a vacancy for a WORKS ASSISTANT to assist generally in the Superintendent Engineer's office at Tone Vale (Psychiatric) Hospital. The duties of the post include making simple drawings and tracings, assisting in preparation of specifications and estimates of cost, and keeping of records and returns. It will be an advantage for applicants to possess a building or engineering background. Whitley Council conditions of service. Salary scale at age 26 or over, £525 x £25(4) to £625 per annum (if under 26, a lower salary is payable). Normal working hours 38 per week. Applications should be forwarded immediately, stating age, present post and experience, together with the names of two referees, to the Group Secretary, Tone Vale Hospital, Norton Fitzwarren, Taunton, Somerset.

EAST HAM
COUNTY BOROUGH.

ASSISTANT PLANNING OFFICER—GRADE A.P.T. I, £610-£765.

Vacancy in Borough Engineer's Department. London Weighting paid in addition. Salary above minimum paid according to qualifications and experience.

A subsistence allowance may be paid over a reasonable period to person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Details and application form from the Town Clerk, E.6.

Closing date 26th AUGUST, 1960.

EAST HAM
COUNTY BOROUGH.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following temporary appointment :—
SENIOR ASSISTANT ARCHITECT—GRADE IV, £1,065-£1,220.

London Weighting is paid in addition, and a salary in excess of the minimum may be paid according to qualifications and experience. The appointment is for work on a new Technical College and is expected to be for a period of not less than 3 years.

Further details and application forms returnable by 26th AUGUST, 1960, from the Town Clerk, Town Hall, East Ham, E.6.

GREENWICH
METROPOLITAN BOROUGH.

APPOINTMENT OF PRINCIPAL ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a PRINCIPAL ARCHITECTURAL ASSISTANT in the Borough Eng.neer and Surveyor's Department. Salary grade A.P.T. IV (£1,085-£1,220 per annum, plus London Weighting). Commencing salary in accordance with qualifications and experience.

Candidates must be Registered Architects, preferably Associates of the R.I.B.A., with considerable experience in housing and other municipal projects.

Application forms obtainable from the undersigned, to be returned by NOON on THURSDAY, 8th SEPTEMBER, 1960.

G. C. TURK,
Town Clerk.

Town Hall,
Greenwich, S.E.10.
August, 1960.

GREENWICH
METROPOLITAN BOROUGH.

APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the position of JUNIOR ARCHITECTURAL ASSISTANT in the Borough Engineer and Surveyor's Department. Salary : A.P.T. I (£610 to £765 per annum, plus London Weighting. Commencing salary in accordance with experience.

Preference will be given to applicants with experience of architectural drawing who have made suitable progress towards completion of the examination of the R.I.B.A. or R.I.C.S. Facilities available for studies on one day per week.

Form of application obtainable from the undersigned and returnable by NOON on THURSDAY, 8th SEPTEMBER, 1960.

G. C. TURK,
Town Clerk.

Town Hall,
Greenwich, S.E.10.
August, 1960.

CROYDON
EDUCATION COMMITTEE.

CROYDON COLLEGE OF ART. EVENING TEACHER for Painting and Decorating Required from September, 1960.

Hours : 7-9 p.m.
Salary : London Scale.

Applications in writing, stating age, qualifications and experience, to the Principal, College of Art, Fairfield, Croydon.

LONDON
ELECTRICITY BOARD.

ARCHITECTURAL DRAUGHTSMAN.

Applications are invited for the above position in the Architect's Section of the Construction Branch of the Chief Engineer's Department at Lesco House, Stamford Street, S.E.1.

Applicants should be neat draughtsmen and preferably have had several years' experience in an Architect's office.

Pending determination as to the grading of the post within Schedule "B" of the National Joint Board Agreement, the salary will be in the provisional range £755 per annum rising to £855 per annum, inclusive of London Allowance.

Application form obtainable from the Personnel Officer, 46 New Broad-street, London, E.C.2, to be returned completed within fourteen days of the publication date of this notice. Please quote ref. : PER/V/3054/B.

OVERSEAS PUBLIC APPOINTMENTS

GHANA

THE SCHOOL OF ARCHITECTURE, TOWN PLANNING AND BUILDING, KUMASI COLLEGE OF TECHNOLOGY, GHANA.

Applications are invited for the post of SENIOR LECTURER IN BUILDING TECHNOLOGY.

Applicants for the post should hold either Associateship of the Institute of Builders or Associateship of the Royal Institute of British Architects, and have had five years' professional experience and at least five years' teaching experience. The College prepares students for examinations qualifying at present for the Licenciateship of the Institute of Builders, and ultimately for the Associateship. From 1961 onwards there may be some degree level teaching to Engineers reading for the External London B.Sc. examination. The applicant selected will be responsible to the Head of the School for the organisation and running of the Building Technology section.

Contract appointments are normally for five years, and may be renewed. Three months' notice of resignation of an appointment is required on either side.

The contract salary scale for this post is £2,054 x £78-£2,522 per annum.

In addition children's allowances are paid up to a maximum of three, and a gratuity at the end of the contract at the rate of £150 for each year of satisfactory service. The entry point is fixed according to qualifications and experience.

The College is fully residential, and members of staff are housed in pleasant modern bungalows on the spacious campus ; climate and living conditions are good. Annual leave with three free return passages in four years is granted to members of staff and their families.

Application forms and an Information Brochure may be obtained from the Assistant Registrar, Kumasi College of Technology, 29 Tavistock Square, London, W.C.1, who will also be glad to answer any questions about this appointment. The closing date for application is mid-August.

TRADE TESTING OFFICER

Required by GOVERNMENT OF ADEN Labour and Welfare Department on contract for one tour of 18-24 months in first instance. Duties cover organisation of Trade Testing Centre including administration of services of panel of trade testers and of arrangements for training apprentices. Candidates, 35-50 years of age, must have served an apprenticeship to carpentry or joinery and have general experience of building trades. They should preferably hold a C. and G. Certificate and have experience of training and testing apprentices.

Commencing salary in scale (including Pay Differential) £1,040 rising to £1,844 a year. Supplementary Allowance £96-£144 a year payable to officer with dependent children. Gratuity at rate of 12½ per cent of total salary drawn and generous additional termination payment if contract not renewed. Free passages. Allowance up to £288 annually towards cost of children's education in U.K. Outfit Allowance £60. Quarters provided at reasonable rent.

Write to the CROWN AGENTS, 4 Millbank, London, S.W.1. State age, name in block letters, qualifications and experience and quote M2B/51105/B28.

INSPECTORS OF WORKS

(BUILDINGS, MECHANICAL AND WATER)

NORTHERN REGION OF NIGERIA

Applications are invited from suitably qualified candidates to fill several vacancies in the Ministry of Works, Northern Region of Nigeria, as Inspectors of Works, Buildings, Mechanical and Water.

Applicants for Inspectors of Works, Buildings should have a confirmed experience of supervision of erection of large buildings and control of building labour; intimate knowledge of buildings site organisation and must have served apprenticeship in a Building Trade. City and Guilds in a Building Trade is of great assistance. Applicants should have been Trade Foremen or General Foremen in the United Kingdom.

Candidates for Inspectors of Works (Mechanical) should be fully experienced in the operation maintenance and overhaul of all kinds of road construction plant, and commercial vehicles of all types. Experience should include machine shop practice as particularly applied to overhaul of petrol and compression ignition engines and automobile electrical apparatus. Preferences may be given to candidates possessing a City and Guilds certificate in vehicle technology.

For Inspectors of Works (Water) candidates are required to have a recognised apprenticeship as plumber, fitter or pipe layer with at least 5 years' experience in water supply schemes. Possess considerable experience in Water Supply Corporation or Water Works operation and maintenance will be accepted in lieu of apprenticeship.

Salary will depend on qualifications and experience and will be in the range of £906-£1,554 per annum. Generous leave with full pay and other allowances are also payable.

For details and condition of appointment please apply to :—

The Recruitment Secretary
(Overseas),
Northern Region
Recruiting Agency,
9 Northumberland Avenue,
London, W.C.2

SOUTH AUSTRALIAN
GOVERNMENT.

Applications are invited for appointments in the following professions in the Government Service of South Australia :

ARCHITECTS, £A1,170-£A1,920.
ARCHITECTURAL ASSISTANTS, £A1,340-£A1,525.
QUANTITY SURVEYORS, £A1,460-£A1,655.
ASSISTANT QUANTITY SURVEYORS, £A1,340-£A1,525.
SPECIFICATION WRITERS, £A1,340-£A1,525.
SURVEYORS AND ASSISTANT SURVEYORS, £A1,340-£A1,525.
DRAUGHTSMEN, STRUCTURAL, £A1,340-£A1,525.
DRAUGHTSMEN, ARCHITECTURAL, £A895-£A1,280.

Commencing salaries within these ranges according to qualifications and experience.

First-class passages provided for selected applicants and families.

Good leave conditions (Recreation, Sick and Long Service). Superannuation Fund available. Houses on a rental basis provided.

Full information from :
Agent General for South Australia,
50 Strand,
London, W.C.2.
WHItehall 7471.

HONG KONG
GOVERNMENT.

BUILDING SURVEYORS, PUBLIC WORKS DEPARTMENT.

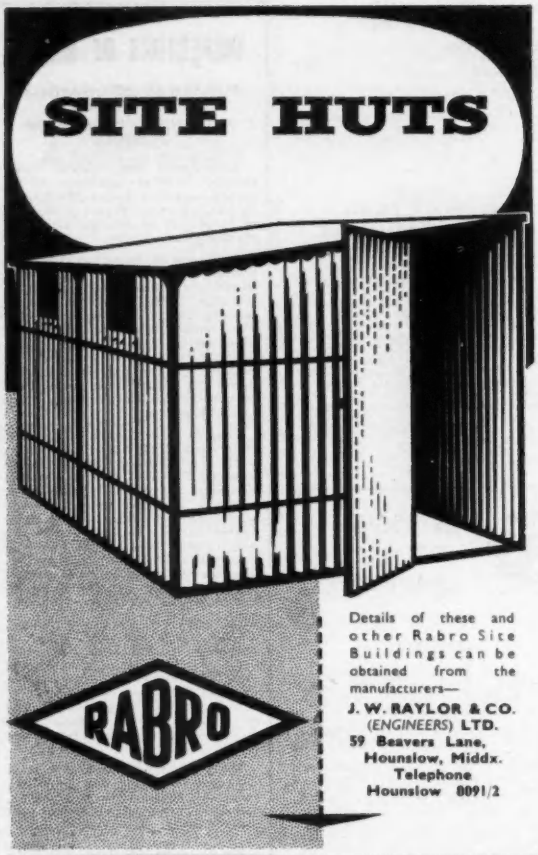
To examine and approve plans submitted by private architects to ensure compliance with the Buildings Ordinance.

Pensionable or contract ; gratuity appointments. Salary within the range £1,650-£2,865. Rented quarters. Free passages.

Candidates must be A.R.I.C.S. (Building) with at least one year's experience after qualifying.

Write to Director of Recruitment, Colonial Office, London, S.W.1, giving full names, age, qualifications and experience, quoting BCD 112/51/02/D28.

SITE HUTS



RABRO

Details of these and other Rabro Site Buildings can be obtained from the manufacturers—

J. W. RAYLOR & CO. (ENGINEERS) LTD.
59 Beavers Lane, Hounslow, Middx.
Telephone Hounslow 8091/2

THE NEW LOOK LINER CADET

the little mixer with the big capacity!

MK 2
½ BAG SIZE
CADET MIXER
WITH PETROL ENGINE OR ELECTRIC MOTOR

FROM **£80**

H.P. TERMS ONLY 10% DEPOSIT

THE LINER CONCRETE MACHINERY CO. LTD.
351, PARK ROAD, GATESHEAD, 8. *Phone: 72501. Grams: 'Liner, Gateshead'*
London Office and Showrooms: Liner House, 2, Lexden Road, Acton, W.3.

Please send full details of items marked 'X'
○ **CADET MIXER** ○ **HYDRAULIC NON-TILT MIXER** ○ **PORTASAW**
NAME .....
ADDRESS .....
351 .....

"COOLERWAY ROYAL"
'NEW LOOK' EXTRACTOR FAN

by METWAY

- **IMPROVED DESIGN**
- **STREAMLINED APPEARANCE**
- **EASIER TO CLEAN**

***But* still incorporating the features of the well-tried Coolerway Fan.**

Price £6.19.6 3-speed regulator 38/- extra.

★Many a beautiful kitchen is spoilt by unpleasant odours and condensation—the 'Coolerway Royal' is the perfect answer.
★Its sleek, white enamelled appearance will adorn any kitchen.
★It's dust and rust proof. TV suppressed and requires no maintenance. Guaranteed 12 months.
★It consumes no more electricity than a 25 watt lamp.
★Installation is simple, with full instructions.
★For horizontal or vertical mounting.

The standard 'Coolerway' Fan will continue to be available at £5.19.6.

Now available:
"Coolerway de Luxe" reversible fan, £10.19.6.

Obtainable from all reputable Builders' Merchants and Electrical Wholesalers.

For details ask for Cat. No. DAR/28/TB.

METWAY • KEMP TOWN • BRIGHTON
Telephone: Brighton 66433

REKAB INSTRUMENTS LTD
for
SURVEYING EQUIPMENT

We carry an extensive stock of new surveying instruments by **COOKE, WATTS, KERN, HALL, etc.,** and a wide range of modern used apparatus.

Specialists in all types of optical scientific instruments with other departments for drawing equipment, photographic and projection apparatus, binoculars and telescopes.

A personal call at our showroom or a postal enquiry will receive the same courteous attention.

263-4 HIGH HOLBORN LONDON WC1
HOLborn 1427 & 4004

GUIDE TO BUYING AND SPECIFICATION

Display Rate 30/- an inch

Name & address only 5/- ; extra words 3d. Bold Type, 7/- ; extra words 6d. Telephone Number 6d. extra

EXCEL ASPHALTE CO. LTD
Telephone: RIVERSIDE 6052 (5 lines)
BROADWAY CHAMBERS, HAMMERSMITH, LONDON, W.6

Use Expandite Sealing Compounds, Sealastik, Asbestumen or Expandite Extrusions Seal-A-Strip. B.B.200.
EXPANDITE LIMITED
Chase Road, London, N.W.10. Tel: ELGar 4321 (10 lines)

PARAMOUNT ASPHALTE LTD.
For ROOFS, DAMPCOURSES
and Coloured Asphalte Floors
149 Kennington Park Rd. S.E.11 Tel.: RELiance 2373, 2191

H.V. SMITH & CO. LTD
ASPHALT
ROOFING
TANKING
FLOORING
WALKDEN HOUSE, MELTON STREET, N.W.1.
EUSton 9292

SALTER, EDWARDS & CO. LTD
ASPHALTERS
LONDON, W.9 Phone: LAD. 1039

ASPHALT FLOORING
PERMANITE
LONDON — ADVance 4477 (20 lines)
BIRMINGHAM — BIRchfields 5041-2
MANCHESTER — BLAckfriars 9469
PORTSMOUTH — Havant 2116

MODERN TECHNIQUE DEMANDS
BROADS
Pakbrik
BRICK HANDLING EQUIPMENT
BROADS MANUFACTURING CO., LTD.
4, SOUTH WHARF, LONDON, W.2
TEL. PAD 7061 (20 LINES)

ACOUSTIC PANELS
"Seco" Selection Construction Co., Ltd. Langham 7931.
Bowaters Sales Co., Ltd.

AGGREGATES (HEAVY)
United Chemicals (London), Ltd.

AIR INLETS (AUTOMATIC)
W. G. PARSONS & SONS, BARBARA CLOSE, ROCHFORD, ESSEX. MANUFACTURERS OF THE "DRAUGHT-MASTER" AND "FLUE-MASTER" WARM FLOW AUTOMATIC AIR INLET-UNITS.

ALUMINIUM CORRUGATED SHEETS
Chalfont Clasps, Ltd.

ALUMINIUM PRODUCTS
NORTHERN ALUMINIUM COMPANY.
THE BRITISH ALUMINIUM CO., LTD.,

ALUMINIUM ROLLER SHUTTERS
J. TAYLOR (SYSTON), LTD., Janus Works, Albert Street, Syston, Leicester. Tel. Nos.: Syston 2133, and Manchester, Ringway 3996.

ALUMINIUM WALL PANELS
MARSLAND & CO., LTD., CONINGTON ROAD, LONDON, S.E.13. TEL.: LEE GREEN 7924/9971.

ANTI-CONDENSATION SHEETS
JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.

ANTI-FREEZERS
BRITISH BITUMEN EMULSIONS LTD., Manufacturers of Kyljack, Dundee Road, Trading Estate, Slough, Bucks. Tel.: Slough 21261/6.
Deeside, Saltney, Nr. Chester. Tel.: Chester 23128.
91a, Lower Ashley Road, Bristol, 2. Tel.: Bristol 51380.
B.B.E. (SCOTLAND) LTD., 20, Mankinfauld Road, Glasgow, E.2. Tel.: Bridgeton 2791.
Sealocrete Products, Ltd. Tretol, Ltd.

ARCHITECTURAL IRONMONGERY
Edward Farr, Ltd.

ARTIFICIAL STONE MANUFACTURERS
MALCOLM MACLEOD & CO., LTD., GLEN ROAD, WALTHAMSTOW, LONDON, E.17. TELEPHONE: COPPERMILL 1147-8.
ENFIELD STONE CO., LTD., GREEN STREET, BRIMSDOWN, ENFIELD, MIDDX. TEL.: HOWARD 2618.
CAMBRIDGE ARTIFICIAL STONE CO., LTD., 121B, MILL ROAD, CAMBRIDGE.

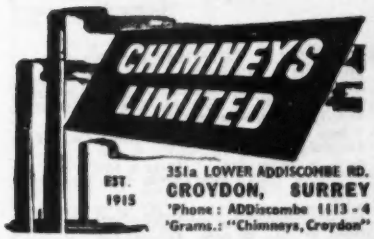
ASBESTOS CEMENT PRODUCTS
HARRISON & CO. (BUILDERS' MERCHANTS), LTD., LEYTONSTONE, LONDON, E.11. (LEY. 5851.) Corrugated and Flat Sheets, Rainwater and Flue Goods. (Supplied and fixed, or supplied only.)
HINE LIMITED, BEDFORD ROAD, LONDON, S.W.4. BRIXTON 1127.
Asbestos Cement Roofings (London), Ltd.
Atlas Stone Co., Ltd.
Expandite, Ltd.

ASPHALT
METROPOLITAN ASPHALTE CO., LTD., The, Boreham Wood, Herts. Tel.: Elstree 1152/3.
RUSSELL Asphalte Co., Ltd., The, 14-16, Bath Road, Eastbourne. Tel.: Eastbourne 4148.
ASPHALTIC (LONDON), LIMITED, 206, UPPER STREET, LONDON, N.1. TEL.: CANONBURY 5550.
THE IMPROVED ASPHALTE CO., LTD., 45/51, NEPTUNE STREET, S.E.16. TELEPHONE: BERMONDSEY 4080.
Associated Asphalte Co., Ltd.
Excel Asphalte Co., Ltd.
General Asphalte Co., Ltd.
Oddi Asphalte.
Paramount Asphalte, Ltd.
Permanite, Ltd.
Pitchmastic & Asphalte, (Manufacturing) Co., Ltd.
Previte & Co., Ltd.
Smith, H. V., & Co., Ltd.
Southern Asphalt, Ltd.

ASPHALT PAVIORS
Wm. SALTER, Edwards & Co., Ltd., Hormead Wharf, Hormead Rd., Harrow Rd., London, W.9
General Asphalte Co., Ltd.
Metropolitan Asphalte Co., Ltd.
Neuchatel Asphalte Co., Ltd.

For all Joints in Concrete Structures and Waterproofing consult
EXPANDITE LIMITED
Chase Road, London, N.W.10. Tel: ELGar 4321 (10 lines)

BUILDERS OF BRITAIN'S LARGEST BRICK CHIMNEY
450 ft. High x 20 ft. Internal Diam. at top.
P. C. Richardson & Co. (Middlesbrough) Ltd.
52–58 Fletcher Street, Middlesbrough
Telephone 45904/5



351a LOWER ADDISCOMBE RD.
CROYDON, SURREY
'Phone: ADDiscombe 1113-4
'Grams.: "Chimneys, Croydon"

NICOLL, DAWSON & HUMPHRIES LTD
Scaffolding Contractors
1, SOUTHERN GROVE
MILE END E.3
Phone: ADVance 1927

PALMERS TRAVELLING CRADLE & SCAFFOLD Co. Ltd
London Address: 3 WOODSIDE GREEN, S.E.25
Tel: Addiscombe 7721-4
Northern Address 211, BOROUGH ROAD, MIDDLESBROUGH. Tel: Middlesbrough 3051.

STEPHENS & CARTER LTD
SCAFFOLDING CONTRACTORS
731-761, Harrow Road, N.W.10
Tel: LADbroke 1191 (7 lines)
HIRE · ERECTION · SALE

DEMOLITION HARDCORE
CLINKER AND ASHES, SAND, BALLAST, ETC.
GEO. E. CLOKE LTD.
In Assn. with HUDSONS DEMOLITION BRANCH "Elmsted", Neasden Lane, N.W.10 Gladstone 4296/7

"Demolition by THE Experts"
JOHN BEESTON & CO. LTD.
290, Stockbrook Street, DERBY.
TEL: DERBY 43686

BARROW MAKERS
Acrow (Engineers), Ltd. Cayless Bros.
Randow Millman, Ltd. Stephens & Carter, Ltd.

BATHS
Clark, Hunt & Co., Ltd. Nicholls & Clarke, Ltd.

BITUMEN SHEETING
Field & Palmer, Ltd. Permanite, Ltd.
McNeill, F., & Co., Ltd. Ruberoid Co., Ltd.

BITUMINOUS SOLUTION MAKERS, Etc.
EXPANDITE LTD., Chase Road, London, N.W.10.
"Cuirass" British Bye-Products, Ltd. Permanite, Ltd.
Dussek Bitumen & Tar-oleum, Ltd. Ruberoid Co., Ltd.
Maxwell, Andrew Sealocrete Products, Ltd.
Tretol, Ltd.

BLOCKS (ROPE)
CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.

BOILER SETTERS
Poulton & Son Ltd. Nu-Way Heating Plants, Ltd.

BRICK HANDLING EQUIPMENT
Broads Manufacturing Co.

BRICKS
Accrington Brick & Tile Co., Ltd. Midhurst Whites, Ltd.
Eastwoods Sales, Ltd. Sussex & Dorking United Brick Co., Ltd.

BRICKS (FACING)
Walley, T. E., Ltd.

BRICKWORK REINFORCEMENT
"Brickforce" B.R.C. Engineering Co., Ltd. Expanded Metal Co., Ltd.
"Bricktor" Johnson's R.C. Engineering Co., Ltd.

BUILDERS & CONTRACTORS
MULLEN & LUMSDEN, LTD., (See displayed advertisement.) MULLEN & LUMSDEN MAINTENANCE, LTD., 5, COPTIC STREET, W.C.1. (Telephone: MUSeum 3705.)
"Seco" Selection Construction Co., Ltd. Langham 7931.
Batty & Smith, Ltd. Higgs & Hill
Demolition and Construction Co., Ltd., The Laing, J., & Son, Ltd.
Lovell, Y. J., & Son, Ltd.
Falkus Bros., Ltd. Negus, W. & M., Ltd.
Galbraith Bros., Ltd. Rush & Tompkins, Ltd.
Gaze, W. H., & Sons, Ltd. Tersons, Ltd.
Trollope & Colls, Ltd.
Greenway & Sons, Ltd. Truett & Steel, Ltd.

BUILDERS' EQUIPMENT
Kwikform, Ltd.

BUILDERS' IRONWORK
SAYGUS SCAFFOLDING, LTD., Camborne Road, Wandsworth, London, S.W.18. Tel.: Vandyke 2462/7361.
A. H. Allen (Engineers), Ltd. Edward Farr, Ltd.

BUILDERS' MERCHANTS
C. COLLIN LTD., The Glass House, High Street, Croydon. Tel.: CRO 2134 (4 lines) and CRO 8321.
Clark, Hunt & Co., Ltd. Nicholls & Clarke, Ltd.
Eastwoods Sales, Ltd. Travis & Arnold, Ltd.

BUILDING PAPER
EXPANDITE LTD., Chase Road, London, N.W.10.
Davidson C., & Son, Ltd.

BUILDING SLABS
"Seco" Selection Construction Co., Ltd. Langham 7931.
"Marlith" Marley Tile Co., Ltd.

CASKS, BARRELS & WATER BUTTS
HAIG'S Cooperages, Ltd., Bank Chambers, Tower Bridge, Tooley Street, London, S.E.1.

CAST STONE
Celcon, Ltd.

CEMENT
Eastwoods Sales, Ltd.

CEMENT PAINTS
SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: VICTORIA 3693.
SEALOCRETE PRODUCTS LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 6015/6/7.

CHAINS & SLINGS
CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.

CHIMNEY BUILDERS & REPAIRERS
Chimney Construction Co., Ltd., The Gray, J. W., & Son, Ltd.
Chimneys, Ltd. Richardson, P. C. & Co (Middlesbrough), Ltd
C. & M. Engineering Co., Ltd. Topping & Leggatt
Edward Farr, Ltd.

SAYGUS SCAFFOLDERS LTD.
Specialists in Travelling Cradles and Tubular Scaffolding
1 Camborne Rd., S.W.18 Tel.: VAndyke 2462/7361

ASPHALT
PERMANITE
LONDON — ADVance 4477 (20 lines)
BIRMINGHAM — BIRchfields 5041-2
MANCHESTER — BLAckfriars 9469
PORTSMOUTH — Havant 2116

'CRUSADER' Chain Link
'WELDBOW' Bow Top
Iron Fencing
Interwoven
GATES
Supply and/or Supply and Fix
THE DARLINGTON FENCING CO. LTD.
P.O. BOX NO. 4, CARR HILL, DONCASTER
Phone: 49489 'Grams: 'Darfen, 'Phone'

VARDALE FENCING Co., Ltd.
68/76 · VARCOE ROAD · S.E.16
BERmondsey 2885/6
ALL TYPES of FENCING and GATES supplied and erected

YOUNGS FENCING
FIRST-CLASS ERECTION SERVICE
YOUNGS OF ORPINGTON LTD.
211-215, HIGH STREET, ORPINGTON, KENT.
Phone: ORPINGTON 26641 (3 lines)

FENCING
CONTRACTORS
W. A. SKINNER & Co. Ltd. (Dept. B)
CITY WHARF, LONG DITTON, SURREY
Telephone: Emberbrook 1960-1961 (2 lines)

FENCING ALL TYPES
ERECTION BY SPECIALISTS
M.S.J. FENCING CONTRACTORS
53 VALLANCE ROAD, LONDON, N.22
BOWES PARK 2790

Use Expandite Joint Fillers and Sealers, Flexcell, Pil-astic Elastite, Vertistrip, Plastijoint and Expandite Mechanical appliances.
EXPANDITE LIMITED
Chase Road, London, N.W.10. Tel. ELGar 4321 (10 lines)

FIBROUS PLASTERWORK
of every description
Cornice Moulds, Ceiling Bands — In stock
ALLIED GUILDS, King Edward Square, Sutton Coldfield

CONCRETE FLOOR SEAL
(OIL & DUST PROOF)
FLUID GLASS PRODUCTS LTD
YEOMAN ST., LONDON, S.E.8
Telephone: BER. 3237

CHURCH SPIRE & TOWER RESTORERS
GRAY, J. W., & SON, LTD., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Cha. 8701-2, and 13, Castle Street, Salisbury. Sal. 2750.

CILLS, COPING, SHELVES, Etc.
BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.

CLADDING
"Seco" Selection Construction Co., Ltd. Langham 7931.
B.I.P. Reinforced Products, Ltd.

CLAMPS (STEEL ADJUSTABLE)
Acrow (Engineers), Ltd.

CLINKERS & ASHES
Cloke, Geo. E., Ltd.

CLOTHES LINES (FRAME TYPE)
CROMPTON COLLING, LTD., Engineers, Frinton-on-Sea, Essex.

CLOTHES LOCKERS
Edward Farr, Ltd.

CLOTHES LOCKERS (STEEL)
Abix (Metal Industries), Ltd

COAL BUNKERS (CONCRETE)
Associated Building Constn. Dev. (Raynes Park), Ltd.

COLOURS FOR CEMENT, CONCRETE ROUGH CAST
SEALOCRETE PRODUCTS LTD., Atlantic Works, Hythe Road, London, N.W.10. Manufacturers of Sealantone Products.
Freeman, Joseph, Sons & Co., Ltd. Sal-Ferricite & Trading Co., Ltd.

CONCRETE CONSTRUCTION
Helical Bar & Engineering Co., Ltd.

CONCRETE FLOOR DUSTPROOFING
SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: VICTORIA 3693.
Adamite Co., Ltd. Sealocrete Products, Ltd
Byrd, A. A. & Co., Ltd. Steel-Crete, Ltd.
Szerelmey, Ltd.
Kerner-Greenwood & Co., Ltd. Tretol, Ltd.
Watco (Sales) Ltd.
Lillington, Geo., & Co., Ltd.

CONCRETE FLOOR SURFACER
Colombus-Dixon Organisation, The

CONCRETE MIXERS
DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel.: Hatfield Peveral 311 (12 lines). Night Tel.: Hatfield Peveral 319.
HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).
WARD, THOS. W., LTD., ALBION WORKS, SHEFFIELD. P.O. BOX 141.
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.
Acrow (Engineers), Ltd. Vales Plant Register
Millars Machinery Co., Ltd.

CONCRETE PILING
WEST'S Piling & Construction Co., Ltd., Bath Road, Harmondsworth, Middlesex. Telephone: Skyport 5222.
Lind, Peter, & Co., Ltd Simplex Concrete Piles Ltd.

CONCRETE POURING SKIPS
ABELSON & CO. (ENGINEERS), LTD., SHELDON, BIRMINGHAM. Tel.: SHELDON 2424.

CONCRETE REINFORCEMENT
Expanded Metal Co., Ltd. Helical Bar & Engineering Co., Ltd.
Jones, T. C. & Co., Ltd.

CONCRETE SHUTTERING
Acrow (Engineers), Ltd. Mills Scaffold Co., Ltd.
Byrd, A. A., & Co.

CONCRETE TOUGHENER
Carter Industrials, Ltd. Sal-Ferricite & Trading Co., Ltd.
Ironite Co., Ltd.
Lillington, Geo. & Co., Ltd. Watco (Sales), Ltd.
Wade, Wilton, E., & Son

CONCRETE WATERPROOFING
SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: VICTORIA 3693.
Expandite, Ltd. "Stic B" Paint Sales Ltd.
Sealocrete Products, Ltd. Tretol, Ltd.

CONSTRUCTIONAL STEELWORK
"Seco" Selection Construction Co. Ltd., Langham 7931.
C. & S. Construction Co., Ltd. Croggon & Co., Ltd.
Edward Farr, Ltd.

ELCO
CORK TILE FLOORING
E. J. ELGOOD LTD.
LONDON, S.E.8
BER. 1144 (7 lines)

MODERN TILE & FLOOR COMPANY LTD.
for
HEAVY DUTY INDUSTRIAL FLOORING,
'MODERNITE' MAGNESITE
JOINTLESS FLOORING,
GRANOLITHIC
TERRAZZO & MOSAIC.
21, Kilburn Lane, London, W.10. Tel.: LAD 6480

ELTEX
ARMOURED PAVING TILES
FOR FACTORY FLOORS
E. J. ELGOOD LTD.
London, S.E.8. Tel.: BER 1144 (7 lines)

IMMEDIATE SERVICE
All Types of Wood Floors Sanded, Sealed, Polished
Lowest Rates ★ Best Finish
LONDON CRYSTAL
62 Lancaster Mews, W.2. Phone PAD 9010-8-9

"ELFIDO"
HEATED WOOD
FLOORS
QUICK RESPONSE
•
INDIVIDUAL ROOM CONTROL
•
LOWEST POSSIBLE COSTS
HARDWOOD FLOORING
CONTRACTORS
EST 1840
WILLIAM THORNTON & SONS LTD.
27 WELLINGTON RD., LIVERPOOL, 8
Tel.: Lark Lane 1921/4 Grams: Thornpool L'pool

CONTRACTORS' PLANT

DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.

HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

PARDIX PLANT, LTD., 62/72, High Street, Cheshunt, Herts. Telephone: Waltham Cross 23496 and 24913.

WARD, THOS. W., LTD., ALBION WORKS, SHEFFIELD, P.O. BOX 141.

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Abelson & Co. (Engineers), Ltd.
Acrow (Engineers), Ltd.
Chamberlain Industries, Ltd.
Clifton, I., & Sons, Ltd.
Cohen, Geo., Sons & Co., Ltd.
Cox, H., & Sons (Plant Hire), Ltd.
Dandridge, A. F., Ltd.
Jones, T. C., & Co., Ltd.
Lewis & Lewis, Ltd.
Mills Scaffold Co., Ltd.
Vales Plant Register, Ltd.

CONTRACTORS' TOOLS
Clifton, I., & Sons, Ltd.

COPPER CYLINDERS
Manchester Tinning Co., Ltd.

COPPER TUBES
Bolton, Thomas, & Sons, Ltd.

CORK SLAB MAKERS
British Cork Mills, Ltd.

CORRUGATED SHEETS
Braby, Fredk., & Co., Ltd.
Croggon & Co., Ltd.
Jones, T. C., & Co., Ltd.

COWLS
Colt, W. H. (London), Ltd.

CRADLE (TRAVELLING)

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551 (3 lines). WORKS: BOOTH STREET, BIRMINGHAM 21. NORTHERN 9367 (2 lines).

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

PETER COX CRADLING CO., Grosvenor 2023.

Acrow (Engineers), Ltd.
Boulton Scaffolding, Ltd.
Cradle-Scaff, Ltd.
Nicholl, Dawson & Humphries, Ltd.
Palmers Travelling Cradle & Scaffold Co., Ltd.
Saygus Scaffolders, Ltd.
Stephens & Carter, Ltd.
Tellok Appliances, Ltd.

CRANE MANUFACTURERS

A.C.E. Machinery, Ltd.
British Hoist & Crane Co., Ltd.
Caswell Cranes & Erection, Ltd.
Cohen, Geo., Sons & Co., Ltd.
Delta (Plant), Ltd.
Morgan, A., & Co.
Record Tower Cranes (G. R. V. Briere)
Ward, Thos. W., Ltd.

CRANES (FOR HIRE)

CASWELL Cranes & Erection, Ltd., Grove Works, Hammersmith Grove, W.6. Tel.: Riverside 5203-4.

Cohen, Geo., Sons & Co., Ltd.
Jones, T. C., & Co., Ltd.
Lewis & Lewis, Ltd.
Vales Plant Register, Ltd.

CURTAIN WALLING (ALUM & STEEL)
John Williams of Cardiff, Ltd.

CYCLE PARKS
Abix (Metal Industries), Ltd.
Edward Farr, Ltd.
Odoni, Alfred A., & Co., Ltd.
Stelcon, Ltd.

DECORATIVE PAINTING CONTRACTORS
British Bitumen Emulsions, Ltd.

DEMOLITION

JOHN BEESTON & CO., LTD. Tel.: DERBY 43686.

Cloke, Geo. E., Ltd.

DISTEMPERS
Morse, A. T., Sons & Co., Ltd.

BRUCE MARTYN LTD
INDUSTRIAL FLOORING
Stirling House, Barnet By-pass, Boreham Wood, Herts. Telephone: Elstree 3781/2

HOUGH
WOOD BLOCK
PARQUET & HARDWOOD STRIP
LINO PLASTIC & CORK TILE
FLOORING
Also
REPAIRS & RESURFACING
HOUGH BROTHERS LTD.
ROEBUCK RD., CHESSINGTON, SURREY
ELMbridge 7928

ELCOLIN
LINOLEUM FLOORING
E. J. ELGOOD LTD.
LONDON, S.E.8
BER. 1144 (7 lines)

HIGH CLASS JOINERY
•FLUSH DOORS•
SHAPLAND
AND PETTER LTD
RALEIGH WORKS
BARNSTAPLE

ECONITE
PRE-FORMED
LAGGING
FOR
HOT WATER PIPES
STORAGE TANKS
CYLINDERS, ETC.
IS
MANUFACTURED ONLY BY
KITSON'S
INSULATIONS LTD.
London Road, BARKING, ESSEX
Telephone: RIPPLEWAY 5544 (5 lines)

CANAL
JOINERY & MOULDING CO. LTD.
1 VARCOE RD, BERMONDSEY S.E.16.
PHONE BERmondsey 2048

T & G WOOD BLOCKS, STRIP, WOOD MOSAIC, ALUFLOOR, TILES & FIGURED OAK PARQUETRY
THE LONDON FLOORING COMPANY FOR GUARANTEED FLOORS
15 & 17 CLOUDESLEY ROAD · LONDON N.1 Telephone: Terminus 6791
MACHINE SURFACING & POLISHING OF EXISTING FLOORS · REPAIRS etc.

ORLIT PIONEERS OF PRECAST REINFORCED CONCRETE FRAMES AND FLOORS. EGHAM 3601/4

DAMP-PROOF COURSES

EXPANDITE, LTD., Chase Road, London, N.W.10.

SMITH, H. V., & CO., LTD., 24 Ashley Place, Westminster, S.W.1.

Anderson, D., & Sons, Ltd.
Blackwells & National Roofings, Ltd.
General Asphalte Co., Ltd.
Kerner - Greenwood & Co., Ltd.
Limmer & Trinidad Lake Asphalt Co., Ltd.
McNeill, F., & Co., Ltd.
Newtonite, Ltd.
Permanite, Ltd.
Ruberoid Co., Ltd.

DOOR SLIDING GEAR

ALDAM, E. Hill, & Co., (All systems), Britannic Works, Red Lion Road, Tolworth, Surbiton, Surrey. ELMbridge 0090 (6 lines).

Ellard Sliding Door Gears, Ltd.

DOOR SPRING REPAIRS

AVENUE SPRING CO. (DOOR SPRINGS), LTD., BARCLAYS BANK CHAMBERS, 1, KINGSLAND HIGH STREET, LONDON, E.8. Tel.: CLISSOLD 0564/5.

THE MAINTENANCE CO., LTD., 146a, LEA BRIDGE ROAD, CLAPTON, LONDON, E.5. Telephone: AMHERST 0388.

DOORS

JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.

DOORS (STEEL)

Clark, Hunt & Co., Ltd.
Edward Farr, Ltd.
Haywards, Ltd.

DOORS (WOODEN), Etc.

F. HILLS & SONS, LTD., NORTON ROAD, STOCKTON-ON-TEES.

Austins of East Ham, Ltd.
Bryce, White & Co., Ltd.
Cattle, R., Ltd.
Lesdertlush, Ltd.
Linden Doors, Ltd.
Sadd, John
Shapland & Petter, Ltd.
Travis & Arnold, Ltd.

DRAIN CLEARING TOOLS

Grey, Charles C.

DRAINAGE ENGINEERS

Burn Bros., Ltd.

DUCTS WORKS

Braby, Fredk., & Co., Ltd.
C. & M. Engineering Co., Ltd.
Clark, Hunt & Co., Ltd.
Edward Farr, Ltd.
Greenwood's and Airvac Ventilating Co., Ltd.
Harvey, G. A., & Co., (London), Ltd.

DUST SHEETS

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM 21. NORTHERN 9367, 2 lines.

Boulton Scaffolding, Ltd.

ELECTRIC DRILLS

Kango Electric Hammers, Ltd.

ELECTRIC HAMMERS

HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines.)

Kango Electric Hammers, Ltd.

ELECTRICAL ACCESSORIES

British Insulated Callender's Cables, Ltd.
General Electric Co., Ltd.
M. K. Electric, Ltd.
Philips Electrical, Ltd.

ESCALATORS

Hall, J. & E., Ltd.

EXCAVATORS

DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel. No.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.

HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines.)

EXPANSION JOINTING FOR CONCRETE ROADS

SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: VICTORIA 3693.

SMITH, H. V., & Co., Ltd., 24 Ashley Place, Westminster, S.W.1.

TRETOL SERVICISED, LTD., 2, Caxton Street, London, S.W.1.

Expandite, Ltd.
Felts and Damp Courses, Ltd.
McNeill, F., & Co., Ltd.
Permanite, Ltd.

CAMPBELL HORNE & Co. Ltd.
Plastering & Granolithic Contractors
411, Hendon Way, Hendon Central, London, N.W.4
Telephone: Hendon 8041

MANDER & GERMAIN
LIMITED
Architectural Craftsmen
MARBLE · STONE · GRANITE
FLOORS · WALL LINING
CHIMNEY PIECES · ETC.
WILLOWBANK WHARF
PUTNEY BRIDGE · LONDON S.W.6
RENown 5474

OSLO AND GOTHENBERG POLE LADDERS
WOOD AND ALUMINIUM EXTENSION LADDERS . STEPS . TRESTLES . etc.
E. FARRAR LTD.
Ladder & Truck Manufacturers
Well Lane, Halifax Tel. 2917
SEND FOR LISTS

ROYDE & TUCKER LTD. Clissold 2737
Patentees & Manufacturers of all types of SASH PULLEYS & CHAIN
ROYTUC REGD. STOKE NEWINGTON RD., LONDON, N.16 117/119

LADDERS
STEPHENS & CARTER LTD
731-761, Harrow Road, N.W.10
TIMBER & ALUMINIUM LADDERS

LUXFER
PAVEMENT LIGHTS
(framed in ferro-concrete or iron)
FLOOR LIGHTS
ROOF LIGHTS
DOME LIGHTS
LANTERN LIGHTS
STALLBOARD LIGHTS
SKYLIGHTS
CEILING LIGHTS
LEADED LIGHTS
FIRE-RESISTING GLAZING
ROOF GLAZING
METAL CASEMENTS
ARCHITECTURAL METAL WORK
TEL.: ELG. 7292
WAXLOW RD. HARLESDEN N.W.10

FELT ROOFINGS

OVERALL-ROOF COVERINGS, 221, RAILWAY VIADUCT, GROVE GREEN ROAD, LEYTONSTONE, E.11. TEL.: LEYTONSTONE 8195 & 7270.

Blackwells & National Roofings, Ltd.
General Asphalte Co., Ltd.
Permanite, Ltd.

FENCING

Astolat Co., Ltd.
Leander Products, Ltd.
Skinner, W. A., & Co., Ltd.
Vardale Fencing Co., Ltd.
Youngs of Orpington, Ltd.

FIBROUS PLASTERWORK

Allied Guilds

FIRE-CHECK DOORWAYS

Linden Doors, Ltd.

FIRE ESCAPE STAIRCASES

Braby, Fredk., & Co., Ltd.
Clark, Hunt & Co., Ltd.
Edward Farr, Ltd.
Gardiner, J., & Co., Ltd.
Haskins
Haywards, Ltd.

FIREPLACE SURROUNDS (TILED)

Eastwoods Sales, Ltd.

FIRES

Allied Ironfounders, Ltd.
Ideal Boilers & Radiators, Ltd.

FLAGSTAFF MAKERS & ERECTORS

CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.

GRAY, J. W., & Son, Ltd., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Chs 8701-2.

FLASHING & CAPPINGS (ALUM & STEEL)

RICHARD CHANTRY & CO., LTD., Faraday Way, St. Mary Cray, Orpington, Kent. Orpington 20307/8.

FLOOR-CENTRES

Acrow (Engineers), Ltd.
Rapid Metal Developments, Ltd.

FLOOR SANDERS

HORSLEY, SMITH & HEWETSON, Hayes, Middlesex. Tel.: 2931. Marfleet, Hull. Tel.: 13880.

FLOOR SEALERS

SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.

Fluid Glass Products, Ltd.
Steel-Crete, Ltd.
Watco (Sales), Ltd.

FLOORING ADHESIVES

Dussek Bitumen & Taroleum, Ltd.
Tretol Associated Products, Ltd.

FLOORING (COMPOSITION)

G. C. Constructional Flooring Co., Ltd.
Martyn, Bruce, Ltd.
Paramount Asphalte, Ltd.
Modern Tile & Floor Co., Ltd.
Thornton, William & Sons, Ltd.

FLOORING CONTRACTORS

General Asphalte Co., Ltd.
G. C. Constructional Flooring Co., Ltd.
Kerr, Robert, & Sons (Flooring), Limited
The London Flooring Co.
Martyn, Bruce, Ltd.
Neuchatel Asphalte Co., Ltd.
Permanite, Ltd.
Philip Flooring Co., Ltd., The
Vigers Bros., Ltd.

FLOORING (CORK)

Armstrong Cork Co., Ltd.
S. Bennett & Son (Wood Flooring), Ltd.
Elgood, E. J., Ltd.

FLOORING (FIREPROOF)

FAWCETT CONSTRUCTION CO., LTD., 117, Victoria Street, London, S.W.1. Victoria 5845.

Girlings' Ferro-Concrete Co., Ltd.
Helical Bar & Engineering Co., Ltd.
Kleine Co., Ltd.
Siegwart Floor Co., Ltd.
Smith's Fireproof Floors, Ltd.

FLOORING (HOLLOW TILE)

FAWCETT CONSTRUCTION CO., LTD., 117, Victoria Street, London, S.W.1. Victoria 5845.

Helical Bar & Engineering Co., Ltd.
Kleine Co., Ltd.

FLOORING (INDUSTRIAL)

Elgood, E. J., Ltd.
General Asphalte Co., Ltd.
Martyn, Bruce, Ltd.
Permanite, Ltd.
Sealocrete Products, Ltd.
Tile Floors (Industrial), Ltd.

FLOORING (JOINTLESS)
Ebner, Jos. F., (1953), Ltd.
General Asphalte Co., Ltd.
Magart, Ltd.
Martyn, Bruce, Ltd.
Philip Flooring Co., Ltd., The
Thornton, William, & Sons, Ltd.

FLOORING (PLASTIC & THERMO PLASTIC)
British Mouldex, Ltd.

FLOORING (RUBBER)
RUBBER FLOORING LTD., Bell Works, Harefield, Middlesex. Tel.: HARefield 2123-5 & 3292.
Runnymede Rubber Co. Ltd.

FLOORING (STEEL)
Edward Farr, Ltd.

FLOORING SUPPLIES
COURTIN, LTD., 9a, Commerce Road, Wood Green, N.22. BOWes Park 0044/0045.
Thornton, William, & Sons, Ltd.

FLOORING (WOOD, WOOD BLOCK, PARQUET)
S. Bennett & Son (Wood Flooring), Ltd.
Calders, Ltd.
Ebner, Jos. F., (1953), Ltd.
De Gay Flooring, Ltd.
Hough Brothers, Ltd.
Leaderflush, Ltd.
London Crystal
Philip Flooring Co. Ltd., The
Stevens & Adams, Ltd.
Vigers Bros., Ltd.

FLOORS (PRESTRESSED)
Costain Concrete, Ltd.

FLUSH DOORS
Linden Doors, Ltd.

FORMWORK (SPECIAL)
Kwikform, Ltd.

FROST PROOFERS
British Bitumen Emulsions, Ltd.

GALVANISED GOODS
Crosson & Co., Ltd.
Braby, F., & Co., Ltd.
Clark, Hunt & Co., Ltd.
Edward Farr, Ltd.
Gardiner, J., & Co., Ltd.
Nicholls & Clarke, Ltd.

GARAGE DOORS
Linden Doors, Ltd.

GAS WATER-HEATERS (GEYSERS)
Ascot Water Heaters.

GATES, RAILINGS (IRON), STAIRWAYS, Etc.
HASKINS, Blackhorse Lane, Walthamstow, London, E.17.
Boulton & Paul, Ltd.
Clark, Hunt & Co., Ltd.
Crosson & Co., Ltd.
Edward Farr, Ltd.
Gardiner, J., & Co., Ltd.
Haywards, Ltd.
Nicholls & Clarke, Ltd.
Potter Rax, Ltd.

GATES (WOOD)
AUSTINS OF EAST HAM, LTD.
Wyckham Blackwell, Ltd.

GLASS FIBRE (LAMINATED ROOF LIGHTS)
ALLAN BLUNN, LIMITED, 29, CRAVEN STREET, LONDON, W.C.2. Tel.: WHItehall 8801-2-3.
B.I.P. Reinforced Products, Ltd.
(Rilite) Rubber Improvement, Ltd.

GLASS MFRS. & MERCHANTS
Clark, James, & Eaton, Ltd.
Farmiloe, Geo., & Sons, Ltd.
Luxfer, Ltd.
Nicholls & Clarke, Ltd.
Pilkington Bros., Ltd.
Pugh Bros., Ltd.

GLASS (STAINED, PAINTED)
Farmiloe, Geo., & Sons, Ltd.
Goddard & Gibbs
Luxfer, Ltd.
Morris Singer Co., Ltd.
Nicholls & Clarke, Ltd.
Pugh Bros., Ltd.

GLAZING
C. COLLIN, LTD., The Glass House, High Street, Croydon. Tel.: CRO 2134 (4 lines) and CRO 8321.
Clark, James & Eaton, Ltd.
Farmiloe, Geo., & Sons, Ltd.
Furniss & Co., Ltd.
Haywards, Ltd.
Luxfer, Ltd.
Mellowes & Co., Ltd.
Newman & Watson, Ltd.
Nicholls & Clarke, Ltd.
Paragon Glazing Co., Ltd.
J. Pearson & Sons (London), Ltd.
Pugh Bros., Ltd.

GRANITE (BROKEN & CHIPPINGS)
COX, H., & Sons, Ltd., 33, Southampton Way, Camberwell, London, S.E.5.

GRANITE (POLISHED)
Art Marbles Stone & Mosaic Co., Ltd.
G. Durkley
Mander & Germain, Ltd.

GRANITE SETTS & KERB
F. J. DANGERFIELD & CO., LTD., 261a, Finchley Road, London, N.W.3. HAMpstead 8044/8

PAINTING
ENQUIRIES WELCOMED FROM
ARCHITECTS · PROPERTY OWNERS
CONTRACTORS AND ESTATE MANAGERS
A · V · COOK & CO. LTD.
MARTINDALE ROAD, BALHAM S.W.12 BAL 6563

Joint Sealing Compounds for
- ROOFING
- CURTAIN WALLING
- DOUBLE GLAZING

USE BUTYL RUBBER BASED
GLASTICON and GLASTICORD
Gun Mastics, Putties & Strip Sealers
KELSEAL
VOGUE HOUSE, HANOVER SQ. LONDON, W.1

FELT ROOFING
PERMANITE
LONDON — ADVance 4477 (20 lines)
BIRMINGHAM — BIRchfields 3041-2
MANCHESTER — BLAckfriars 9469
PORTSMOUTH — Havant 2116

HY-RIB
combined shuttering and reinforcement
long span metal lathing
HY-RIB DIVISION Trascon Limited 35-41 Lower Marsh, London SE1 Telephone WATerloo 6922

E. PARKINSON (LONDON) LTD.
SLATE MERCHANTS
SLATING, TILING & ASBESTOS ROOFING CONTRACTORS
Phone: STA. HILL 3211-2
189 HIGH ROAD, S. TOTTENHAM, N.15

NICOLL, DAWSON & HUMPHRIES LTD
Scaffolding Contractors
1, SOUTHERN GROVE
MILE END E.3
Phone: ADVance 1927

PALMERS TRAVELLING CRADLE & SCAFFOLD Co. Ltd
London Address: 3 WOODSIDE GREEN, S.E.25
Tel: Addiscombe 7721-4
Northern Address: 211, BOROUGH ROAD, MIDDLESBROUGH. Tel: Middlesbrough 3051.

STEPHENS & CARTER LTD
SCAFFOLDING CONTRACTORS
731-761, Harrow Road, N.W.10
Tel: LADbroke 1191 (7 lines)
HIRE · ERECTION · SALE

GRANOLITHIC PAVING
MALCOLM MACLEOD & CO., LTD., GLEN ROAD, WALTHAMSTOW, LONDON, E.17. TELEPHONE: COPPERMILL 1147/8.
GRANO-METALLIC Paving and Plastering Co., Ltd., 557, Lea Bridge Road, London, E.10.

GUTTERS (CAST IRON)
HILLS BROS. (City 3094).

GUTTERS (CONCRETE)
Finlock Gutters, Ltd.

GUTTERS (HEAVY PRESSED STEEL)
E. STEPHENS & SON, LTD., 58-66, Bath Street, London, E.C.1. Clerkenwell 1731.

HEATING APPARATUS
Clark, Hunt & Co., Ltd.
Ideal Boilers & Radiators, Ltd.
Nicholls & Clarke, Ltd.

HEATING & VENTILATING
Newman & Watson, Ltd.
Clark, Hunt & Co., Ltd.
Watkin Heating Co., Ltd., The

HOISTS
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.
A.C.E. Machinery, Ltd.
British Hoist & Crane Co., Ltd.
Morgan, A., & Co.
Ward, Thos. W., Ltd.

INCINERATORS
Braby, Fredk., & Co., Ltd.
Edward Farr, Ltd.
Harvey, G. A., & Co. (London), Ltd.

INSULATING MATERIALS
JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.
"Seco" Selection Construction Co., Ltd. Langham 7931.
British Plaster Board, Ltd., The
Cape Asbestos Co., Ltd., The
Celotex, Ltd.
Dutton, Leonard, & Sons
Gyproc Products, Ltd.
McNeill, F., & Co., Ltd.
"Marith" Marley Tile Co., Ltd.
"Parovents" Paramount Asphalte, Ltd.
Permanite, Ltd.
Stramit Boards, Ltd.
Sundeala Boards Co., Ltd.
Thermacoust, Ltd.

INSURANCE
Builders' Accident Insurance, Ltd.

IRON & STEEL PROTECTION
"Galvafroid" Secomastic, Ltd.

IRON & STEEL STOCKHOLDERS
HALL BROTHERS, (WEST BROMWICH), LTD., Eagle Works, Greets Green, West Bromwich. Tel.: Tipton 1011 (10 lines). Telegraphic address: EAGLE WEST BROMWICH.
Clark, Hunt & Co., Ltd.
Dunlop & Ranken, Ltd.
Jones, T. C., and Co., Ltd.

KITCHEN UNITS
Austins of East Ham, Ltd.

JOINERY
Austins of East Ham, Ltd.
Cattle, R., Ltd.
Edmonds & Co., Ltd.
Fosters (Woodworkers), Ltd.
James Joinery
Linden Doors, Ltd.
Sadd, John, & Sons, Ltd.

LADDERS (LOFT)
HENRY L. COCKLE, LTD., 9, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1. Tel.: ABBEY 4471-2.

LADDER MAKERS (EXTENSION, Etc.)
HENRY L. COCKLE, LTD., 9, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1. Tel.: ABBEY 4471-2.
PODMORE WORKS LIMITED, 769, 775, Garratt Lane, London, S.W.17. (Also Steps, Trustles.) Tel.: Wimbledon 7622.
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.
Cayless Bros.
Farrar, E., Ltd.
Stephens & Carter, Ltd.
Scaffolding (Gt. Britain), Ltd.

LADDERS (STEEL)
Edward Farr, Ltd.

LAMINATED PLASTICS
Bakelite, Ltd.
Berite, Ltd.
Holoplast, Ltd.
Warite, Ltd.

LAMPS
Randow Milliman, Ltd.

LEADS, OIL COLOURS, SIZE
Farmiloe, Geo., & Sons, Ltd.
Nicholls & Clarke, Ltd.

LEAD (ORNAMENTAL), Etc.
STONER & SAUNDERS, LTD., 20, Woodfield Road, Paddington, W.9. Tel.: CUNningham 3321-2-3.

LEAD (SHEET & PIPE)
Farmiloe, Geo., & Sons, Ltd.

LEADED LIGHT MANUFACTURERS
Farmiloe, Geo., & Sons, Ltd. Goddard & Gibbs
Nicholls & Clarke, Ltd.

LIFTING GEAR
CHARLES BUTTERFIELD, LTD., SOBRAON WORKS, STRATFORD, E.15.
A. H. Allen (Engineers), Ltd
Clifton, I., & Sons, Ltd. Moore, W. & E., Ltd.

LIFTS
HAMMOND & CHAMPNESS, LTD., Gnome House, Walthamstow, London, E.17.
LONDON LIFT CO., 103, WORSHIP STREET, LONDON, E.C.2.
JENSEN LIFTS, LTD., (LIFT AND SPECIALIST ENGINEERS), REGent 2593, Keith House, 133, Regent Street, London, W.1
Bennie Lifts, Ltd. Penrose Lifts, Ltd.
Dennison, Kett & Co., Ltd. Pickerings, Ltd.
Hall, J. & E., Ltd. Steven, A. & P., Ltd.

LIGHTING DESIGN SERVICE
Philips Electrical, Ltd.

LIGHTNING CONDUCTORS
ELLIOTT, A. W. (Steeplejacks), & Co., Ltd.
GRAY, J. W., & SON, LTD., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Chs. 8701-2, and 13, Castle Street, Salisbury. Sal. 2750.
WM. & R. W. BACON, LTD., 55, REDBRIDGE LANE, ILFORD, ESSEX. Tel.: CRESCENT 5347.
Furse, W. J., & Co., Ltd.

LIGHTWEIGHT STAGING
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

LINOLEUM
Catesbys, Ltd. Elgood, E. J., Ltd.

LOCKS, LATCHES, Etc.
Adams, Robert, (Victor), Ltd.

MACHINERY & PLANT
DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.
Acrow (Engineers), Ltd. Lewis & Lewis, Ltd.
Chamberlain Industries, Ltd. Liner Concrete Machinery Co., Ltd.
Danckaerts Woodworking Machinery, Ltd. Millars Machinery Co., Ltd.
Dandridge, A. F., Ltd. Scaffolding (Gt. Britain), Ltd.
Jones, T. C., Ltd.

MARBLE
JOHN STUBBS (MARBLE & QUARZITE), LTD., MERSEY WORKS, SMITHDOWN LANE, LIVERPOOL, 7. Tel.: ROYAL 4951.
Art Marbles Stone & Mosaic Co., Ltd. G. Dunkley
Mander & Germain, Ltd.

MECHANICAL KEYING FOR RENDERINGS
SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.

METAL WINDOWS REPAIRS
METAL WINDOW RENOVATORS, BARCLAYS BANK CHAMBERS, 1, KINGSLAND HIGH STREET, LONDON, E.8. Tel.: CLISSOLD 0564/5.
THE MAINTENANCE CO., LTD., 146a, LEA BRIDGE ROAD, CLAPTON, LONDON, E.5. Tel.: AMHERST 0388.

METAL WORK
E. STEPHENS & SON, LTD., 58-66, Bath Street, London, E.C.1. Clerkenwell 1731.
Potter Rax, Ltd.

MORTAR PLASTICISERS
BRITISH BITUMEN EMULSIONS LTD., Manufacturers of Plycomor, Dundee Road, Trading Estate, Slough, Bucks. Tel.: Slough 21261/6.
Deeside, Saltney, Nr. Chester. Tel.: Chester 23128.
91a, Lower Ashley Road, Bristol, 2. Tel.: Bristol 51380.
B.B.E. (SCOTLAND) LTD., 20, Maukinfauld Road, Glasgow, E.2. Tel.: Bridgeton 2791.
CLODOL INDUSTRIES LTD.
SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.
SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: VICTORIA 3693.
Lillington, Geo., & Co., Ltd. Sika, Ltd.
Tretol, Ltd.

MOSAIC & TERRAZZO PAVING
Cope & Co., Ltd. Marbolith Flooring Co., Ltd.

ASBESTUMEN, MULSEAL, PLASTIJOINT
EXPANDITE LIMITED
Chase Road, London, N.W.10 Tel ELSor 4321 (10 lines)

McLELLAN RAWSON & CO. LTD.
STOCKISTS
WESTERN
RED CEDAR SHINGLES
COLUMBIA SAWMILLS, HEDON ROAD, HULL.

STONE RESTORATION AND CLEANING
PETER COX & PARTNERS LTD.
33 NORTH ROW, LONDON, W.1
Mayfair 1306/5076

STEELWORK
"WHEN YOU NEED IT"
C & S CONSTRUCTION CO. LTD.
STRUCTURAL ENGINEERS
STEEL STOCKHOLDERS
ISLEWORTH, MIDDX.
Phone: ISLeworth 4155 (7 lines)

New Life in Old Stones
A specialist service in stonework
NEW STONE & RESTORATION LTD.,
33, Sloane Street, London, S.W.1
BELgravia 6271/2

STRUCTURAL STEELWORK
FOR ALL TYPES OF INDUSTRIAL PROJECTS, DESIGNED & FABRICATED TO SUIT SPECIFIC REQUIREMENTS. ERECTED & SHEETED IF NECESSARY.
COMPLETE FRAME-WORKS
STANCHIONS PURLINS ETC.
NEW STEEL ROOF TRUSSES
TRUSSES 10'0" TO 100'0" SPAN
NORTHARC ORGANISATION LTD.
260, LANGHAM ROAD, WEST GREEN, LONDON, N.15.
PHONE: BOWES PARK 3757 & 7548

"AQUAREP"
for 100% Waterproof Concrete
"FLUTOL B"
for Damp-proofing Interiors
Send for details.
DAMP-PROOFING LTD.
DEPTFORD, LONDON, S.E.8
TIDeway 1486-7

SZERELMEY
ESTABLISHED OVER 100 YEARS
Restoration, Preservation and Cleaning.
273-277, Rotherhithe New Road, London, S.E.16
Phone: Bermondsey 3094

NAME PLATES AND SIGNS
G. MAILE & SON, LTD., 7a, Bayham Street, London, N.W.1. Engravers of Bronze Name Plates & Signs. Telephone: Euston 7252-3.

OFFICE EQUIPMENT
Clifton, I., & Sons, Ltd. Sankey-Sheldon, Ltd.
Libraco, Ltd.

OVERHEAD DOOR GEAR & GARAGE DOORS
AUSTINS OF EAST HAM, LTD.

PAINT & VARNISH MFRS.
DRYNAMELS, LTD., SHAFTMOOR LANE, HALL GREEN, BIRMINGHAM, 28. Tel.: SPRINGFIELD 4481/2/3/4.
SEALOCRETE PRODUCTS, LTD., Atlantic Works, Hythe Road, N.W.10. Tel.: Ladbroke 0015/6/7.
Blundell, Spence & Co., Ltd. Morse, A. T., Sons & Co., Ltd.
Dixon's Paints, Ltd. Nicholls & Clarke, Ltd.
Duresco Products, Ltd. Pinchin Johnson & Co.
Farmiloe, Geo., & Sons, Ltd. Silexine Paints, Ltd.
Hubbuck, Thomas, & Son, Ltd. Sissons Bros., & Co., Ltd.
Lillington, Geo., & Co., Ltd. "Stic B" Paint Sales Ltd.
Tretol, Ltd.

PAINTING CONTRACTORS
Alfred Bagnall & Sons, Ltd. Cook, A. V., & Co., Ltd.
Bayliss, Ernie, Ltd. Decorative Painting Contractors, Ltd.

PARTITIONS
AUSTINS OF EAST HAM, LTD.
Stramit Boards, Ltd.

PARTITIONS (CELLULAR CORE)
JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.

PARTITIONS (METAL)
John Williams of Cardiff, Ltd.

PARTITIONS (STEEL)
Abix (Metal Industries), Ltd. Edward Farr, Ltd.

PAVEMENT LIGHTS
HAYWARDS, LTD., Union Street, Borough, London, S.E.1. Phone: Waterloo 6035 (5 lines)
JOHN HEALEY (London), Ltd., 32, Shaftesbury Avenue, London, W.1. Ger. 2610.
Luxfer, Ltd.

PELMETS
VENETIAN-BLIND SPECIALISTS (Seawright), LTD., STATION APPROACH, WALTHAM CROSS, HERTS. Telephone: WS 23582.

PERSPEX CORRUGATED
HARRISON & CO. (BUILDERS' MERCHANTS), LTD., R.R. GOODS DEPOT, LEYTONSTONE, LONDON, E.11. (LEY. 5851.)

PIPES (CONCRETE)
Eastwood Sales, Ltd.

PLASTERS
HARRISON & CO. (BUILDERS' MERCHANTS), LTD., LEYTONSTONE, LONDON, E.11. (LEY. 5851.) Carlite, Parlstone, Thistle, etc., Plasterboards, etc.
Gyproc Products, Ltd. Gypsum Mines, Ltd.

PLASTERERS
Pollock Bros. (London), Ltd. Campbell Horne & Co., Ltd.

PLASTERING
APEX PLASTERING, LTD., 2, HEREFORD ROAD, EALING, W.5. TEL.: EAL 1233.

PLATFORM STAGINGS
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.
Boulton Scaffolding, Ltd.

PLUMBING CONTRACTORS
J. A. WILLIS & CO., 47, ELDON ROAD, N.22. BOW 4413.
Newman & Watson, Ltd.

PLUMBERS' BRASSWORK
Farmiloe, Geo., & Sons, Ltd.

PLYWOOD
W. M. LOOMAN & CO., LTD., 26-28, TABERNACLE STREET, FINSBURY SQUARE, E.C.2. Telephone: MONarch 0803-4.
William T. Iden (London), Ltd. Travis & Arnold, Ltd.

POLES
AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

PORTABLE AIR COMPRESSORS & ROAD BREAKERS

BROOM & Wade, Ltd., Engineers, High Wycombe, Bucks.

HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

Cox, H., & Sons (Plant Hire), Ltd.

PORTABLE BUILDINGS

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Clifton, I., & Sons, Ltd. Podmore Works, Ltd. Marley Tile Co., Ltd.

PORTABLE POWER TOOLS

ARTHUR DRYSDALE & CO., LTD., 58, Commerce Road, Wood Green, London, N.22. Tel.: Bowes Park 7221. New, Used, Bought, Sold, Exchanged, Hired.

Cole, E. R., Ltd.

PRECAST CONCRETE MFRS.

MALCOLM MACLEOD & CO., LTD., GLEN ROAD, WALTHAMSTOW, LONDON, E.17. TELEPHONE: COPPERMILL 1147/8.

CAMBRIDGE ARTIFICIAL STONE CO., LTD., 121B, MILL ROAD, CAMBRIDGE.

Atlas Stone Co., Ltd. Concrete, Ltd. Costain Concrete Co., Ltd. Finlock Gutters, Ltd. Helical Bar & Engineering Co., Ltd. Kleine Co., Ltd.

PRECAST FLOORING & ROOFING

Helical Bar & Engineering Co., Ltd. John Cooke & Son (Huddersfield), Ltd.

PREFABRICATED CONSTRUCTIONS

"Seco" Selection Construction Co., Ltd. Langham 7931.

PROPS, STRUTS (STEEL)

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

MABEY & JOHNSON, LTD., MANUFACTURERS, 54, VICTORIA STREET, S.W.1. VICtoria 8025-8. Manchester, Broughton 3959.

Acrow (Engineers), Ltd. Boulton Scaffolding, Ltd. Mills Scaffold Co., Ltd. Random Millman, Ltd. Scaffolding (Gt. Britain), Ltd. Steel Scaffolding Co., Ltd.

PROTECTIVE CLOTHING

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Clifton, I., & Sons, Ltd. Random Millman, Ltd.

PUMPS, PUMPING ENGINEERS

HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

Greenwich Pump & Plant Co., Ltd. Lewis & Lewis, Ltd. Millars Machinery Co., Ltd. Vales Plant Register Ltd.

PUTTY MANUFACTURERS

Farmiloe, Geo., & Sons, Ltd. Hubbuck, Thomas, & Son, Ltd.

QUARZITE

JOHN STUBBS (MARBLE & QUARZITE), LTD., MERSEY WORKS, SMITHDOWN LANE, LIVERPOOL, 7. Tel.: ROYAL 4951.

RACKING (STEEL)

Abix (Metal Industries), Ltd. Edward Farr, Ltd.

RAINWATER GOODS

Braby, F., & Co., Ltd. Farmiloe, Geo., & Sons, Ltd. Edward Farr, Ltd. Harvey, G. A., & Co. (London), Ltd. Nicholls & Clarke, Ltd.

RAWLPLUGS

Rawlplug Co., Ltd.

RECONSTRUCTED STONE

Ferro-Concrete (Shepperton), Ltd. Girlings' Ferro-Concrete Co., Ltd.

R.C. PRECAST FLOORING & ROOFING

ORLIT, LIMITED, VICARAGE ROAD, EGHAM, SURREY. EGHAM 3601/4.

Celcon, Ltd. Concrete, Ltd. Costain Concrete Co., Ltd. Girlings' Ferro-Concrete Co., Ltd. Helical Bar & Concrete Engineering Co., Ltd.

REINFORCEMENT STEEL

Expanded Metal Co., Ltd. Helical Bar & Engineering Co., Ltd. Johnson's R.C. Engineering Co., Ltd. Jones, T. C., & Co., Ltd. Truscon, Ltd. R. C. (Steel), Ltd.

RIVETS, (ROOFING, CEILING)

Tucker, Geo., Eyelet Co., Ltd.

EDWARD FARR LTD.

Napier Works, London, E.6

Tel: Gra. 3431/3

Bridge Works Wickford 2380

Structural Steelwork

Plate Fabrications

Steel Flooring

Railings and Gates

Rolled, Forged or Cold Pressed Rings of all Sections and Diameters

RECONDITIONED AND REDRESSED EX-RAILWAY TARPAULINS

Specially selected, repaired, complete with eyelets and new tie-ropes

Satisfaction fully guaranteed . Immediate delivery
Carriage paid . Remittance with order

SIZE	Reconditioned and Redressed both Sides	
10′ x 7′	£1.10.0	each
14′ x 10′	£3. 0.0	„
20′ x 14′	£6.10.0	„

SIZE	Repaired and Reconditioned Tarpaulins	
20′ x 14′	£5.0.0	each
14′ x 10′	£2.5.0	„
10′ x 7′	£1.0.0	„

Only best quality linseed oil dressing used

S. & J. FITTON (TARPAULINS) LTD.

COCKHEDGE LANE, WARRINGTON. Phone: 35233 (2 lines)

Boyle's Patent Air Pump Ventilator

OVER TWO MILLION IN USE

ROBERT BOYLE & SON

VENTILATING ENGINEERS

OYSTER LANE, BYFLEET, SURREY

Tel. BYFleet 4376

TOMO

DOUBLE GLAZED 'Picture' WINDOWS

Tomo stock-size horizontal pivot-hung windows have excellent thermal efficiency values and sound reduction properties. Made of best quality softwood, ready-primed, to B.S.644
5′11½″ wide x 4′0½″: £25.0.0. nett.
4′0½″ x 4′0½″ high £22.10.0. nett.
(ex works)

AVAILABLE FROM STOCK!

Full details sent on request:
TOMO TRADING CO. LTD, Cowley Peachey, Uxbridge, Middx. Telephone: West Drayton 3751
British Made

REINFORCED CONCRETE ENGINEERS & CONTRACTORS

HILLS Structures & Foundations, Ltd., Heather Park Drive, Wembley, Middlesex.

ORLIT, LIMITED, VICARAGE ROAD, EGHAM, SURREY. EGHAM 3601/4.

FAWCETT CONSTRUCTION CO., LTD., 117, Victoria Street, London, S.W.1. Victoria 5843.

INDENTED BAR & CONCRETE ENGINEERING CO., LTD., 171, VICTORIA STREET, WESTMINSTER, S.W.1. TEL.: VICTORIA 1642 (2 lines).

British Reinforced Concrete Engineering Co., Ltd. Expanded Metal Co., Ltd. Girlings' Ferro-Concrete Co., Ltd. Helical Bar & Engineering Co., Ltd. Jones, T. C., & Co., Ltd. Kleine Co., Ltd. Lind, Peter, & Co., Ltd. Simplex Concrete Piles Ltd.

ROAD-MAKING EQUIPMENT

BROOM & Wade, Ltd., Engineers, High Wycombe, Bucks.

HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

Vales Plant Register, Ltd.

ROLLING SHUTTER MFRS.

J. TAYLOR (SYSTON), LTD., Janus Works, Albert Street, Syston, Leicester. Tel. Nos.: Syston 2133 and Manchester, Ringway 3996.

ROOF INSULATION

JABLO Plastics Industries, Ltd., Mill Lane, Waddon, Croydon, Surrey.

"Seco" Selection Construction Co., Ltd. Langham 7931.

British Hermeseal, Ltd. Stramit Boards, Ltd.

ROOF LIGHTS

ALLAN BLUNN, LIMITED, 29, CRAVEN STREET, LONDON, W.C.2. Telephone: WHItehall 8801-2-3.

Farmiloe, Geo., & Sons, Ltd. Haywards, Ltd. Mellowes & Co., Ltd. Paragon Glazing Co., Ltd. (Rilite) Rubber Improvement, Ltd.

ROOF PANELS

"Seco" Selection Construction Co., Ltd. Langham 7931.

ROOFING COMPOUNDS

BRITISH BITUMEN EMULSIONS LTD., Dundee Road, Trading Estate, Slough, Bucks. Tel.: Slough 21261/6.

Deeside, Saltney, Nr. Chester. Tel.: Chester 23128.

91a, Lower Ashley Road, Bristol, 2. Tel.: Bristol 51380.

B.B.E. (SCOTLAND) LTD., 20, Maukinfauld Road, Glasgow, E.2. Tel.: Bridgeton 2791.

SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: Victoria 3693.

"RITO" & "RITOLASTIC," ANDREW MAXWELL DIVISION (*The Liverpool Borax Co., Ltd.*) Maxwell House, St. Paul's Square, Liverpool, 3.

"Aquaseal," Berry Wiggins & Co., Ltd. "Bituseal" Products, Ltd. "Cuirass," British Bye-Products, Ltd. Dussek Bitumen & Taroleum, Ltd. Expandite, Ltd. Farmiloe, Geo., & Sons, Ltd. Permanite, Ltd. Ruberoid Co., Ltd. Tretol, Ltd.

ROOFING CONTRACTORS

Asphalte (London), Ltd. Berry Wiggins & Co. Ltd. Bestwoods Specialists, Ltd. Excel Asphalte Co., Ltd. General Asphalte Co., Ltd. McNeill, F., & Co., Ltd. Neuchatel Asphalte Co., Ltd. Parkinson, E. (London), Ltd. Permanite, Ltd. Roberts, Adlard & Co., Ltd. Salter, Edwards & Co., Ltd. Southern Asphalt, Ltd

ROOFING FELT

Blackwells & National Roofings, Ltd. Felts & Damp Courses, Ltd. F. McNeill & Co., Ltd. Permanite, Ltd. Podmore Works, Ltd. Ruberoid Co., Ltd.

ROOFINGS (VARIOUS BRANDS)

Anderson, D., & Sons, Ltd. "Corroplast" Holoplast, Ltd. "Lion" McNeill, F., & Co., Ltd. Permanite Ltd. (Permanite "Blanco," "Rustfiex"). Ruberoid Co., Ltd.

SAND & GRAVEL MERCHANTS

COX, H., & Sons, Ltd., 33, Southampton Way, Camberwell, London, S.E.5.

Eastwoods Sales, Ltd.

SANITARY FITTINGS & ENGINEERS

TIMMINS & FOULKES, LTD., King Street, Dudley, Worcs.

Burn Bros. (London), Ltd. Clark, Hunt & Co., Ltd. Eastwoods Sales, Ltd. Farmiloe, Geo., & Sons, Ltd. Greenwood & Hughes, Ltd. Haywards, Ltd. Nicholls & Clarke, Ltd.

SANDERS (ELECTRIC)
HINE LIMITED, BEDFORD ROAD, LONDON, S.W.4. BRIXTON 1127.

SASH CHAINS & SASH PULLEYS
RHODES CHAINS, LTD., Carlisle House, 8, Southampton Row, London, W.C.1. Telephone: CHAncery 9377 (3 lines).
Royde & Tucker, Ltd.

SCAFFOLDING
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.
Boulton Scaffolding, Ltd. Kwikform, Ltd.

SEALING COMPOUNDS
SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: Victoria 3693.
EXPANDITE, LTD., Chase Road, London, N.W.10.
KELSEAL, LTD., Vogue House, Hanover Square, London, W.1. Hyde Park 1411.

SECTIONAL BUILDINGS
Clifton, I., & Sons, Ltd.

SHEETERS (ASBESTOS CEMENT)
HINE LIMITED, BEDFORD ROAD, LONDON, S.W.4. BRIXTON 1127.

SHEET METAL WORKERS
E. STEPHENS & SON, LTD., 58-66, Bath Street, London, E.C.1. Clerkenwell 1731.
Clark, Hunt & Co., Ltd. Edward Farr, Ltd. Gardiner, J., & Co., Ltd. Harvey, G. A., & Co. (London), Ltd.

SHELTERS
Clifton, I., & Sons, Ltd.

SHELVING (STEEL)
Abix (Metal Industries), Ltd. Edward Farr, Ltd.

SHINGLES (CEDAR WOODS)
Colt, W. H. (London), Ltd. McLellan Rawson & Co., Ltd.

SHOP & OFFICE FITTERS
JAMES WHITE (SHOPFITTERS), LTD., TEAM VALLEY TRADING ESTATE, GATESHEAD 11, CO. DURHAM. Tel.: LOW FELL 76077.
Edmonds, A., & Co., Ltd. Pollard, E., & Co., Ltd.

SHORES, ADJUSTABLE
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.
Acrow (Engineers), Ltd. Boulton Scaffolding, Ltd. Scaffolding (Gt. Britain), Ltd. Steel Scaffolding Co., Ltd.

SHUTTERS, REVOLVING & ROLLING
HASKINS "Rolador," Blackhorse Lane, Walthamstow, London, E.17.
Dennison, Kett & Co., Ltd. Haywards, Ltd. Hirschhorn, E., & Co., Ltd. Mather & Platt, Ltd. Shutter Contractors, Ltd. Taylor, J. (Syston), Ltd.

SLATE & TILE MERCHANTS
BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.
ETRIDGE, J. J., Junr., Bethnal Green Slateworks, London, E.2.
Parkinson, E. (London), Ltd.

SLATE (CILLS, COPING SHELVES, Etc.)
BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.
INIGO JONES & CO., TUDOR SLATE WORKS, GROELSON, CAERNARVON. TEL.: LLANWYNDA 242.

SLIDING DOOR GEAR
ALDAM, E. Hill, & Co., (All Systems) Britannic Works, Red Lion Road, Tolworth, Surbiton, Surrey. ELMbridge 0090 (6 lines).
ELLARD SLIDING DOOR GEARS, LTD., Works Road, Letchworth, Herts. Tel.: 613/4.
HENDERSON, P. C., LTD., ROMFORD, ESSEX (Complete range). Tel.: Ingrebourne 4111 (8 lines).
KING, Geo. W., Ltd., (All Systems), Argyle Works, Stevenage, Herts. Stevenage 440 (10 lines).

SLOTTED ANGLE (STEEL)
Abix (Metal Industries), Ltd.

WELDED STEEL PRODUCTS OF ALL DESCRIPTIONS in ⅛" to ½" M.S. PLATE
AIR RECEIVERS
HOPPERS
TANKS
C. & M. ENGINEERING Co. LTD.
CHIMNEYS
PRESSURE
VESSELS
ANGLE & FLAT RINGS, ETC.
THAMES RD., BARKING, ESSEX.
Telephone RIPpleway 3011-2

PALMERS TRAVELLING CRADLE & SCAFFOLD Co. Ltd.
London Address: 3 WOODSIDE GREEN, S.E.25 Tel: Addiscombe 7721-4
Northern Address: 211, BOROUGH ROAD, MIDDLESBROUGH Tel: Middlesbrough 3051.

GEORGE LILLINGTON & Co., Ltd., Willow Lane, Mitcham, Surrey. No. 2 METALLIC LIQUID
A colourless solution for waterproofing exterior walls

ZETA WOOD FLOORING CO. (1910) LTD.
40 years' experience at your service
All types WOOD FLOORS.
Renovation and Machine
SURFACING.
Magnesite Composition
PARQUETRY.
FREDERICK STREET, STRATFORD, E.15
Maryland 2678

Call at
THE BUILDER BOOKSHOP
for a comprehensive selection of titles
THE BUILDER LIMITED, The Builder House, Catherine Street, Aldwych, London, W.C.2
Telephone: TEMPLE Bar 6251 (Extension 5)

SPLITHEADS
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM 21. NORTHERN 9367, 2 lines.
Boulton Scaffolding, Ltd.

STAGE EQUIPMENT
Fosters (Curtains), Ltd.

STEEL CHIMNEY SHAFTS
C. & M. Engineering Co., Ltd. Edward Farr, Ltd. Gray, J. W., & Son, Ltd.

STEEL LOCKERS
Edward Farr, Ltd.

STEEL MOULDS FOR CONCRETE PRODUCTS
Acrow (Engineers), Ltd.

STEEL OFFICE & FACTORY EQUIPMENT
Sankey-Sheldon, Ltd.

STEEL SCAFFOLDING See also Tubular Scaffolding
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM, 21. NORTHERN 9367, 2 lines.
Boulton Scaffolding, Ltd. Cradle-Scaff, Ltd. Nicholl, Dawson & Humphries, Ltd. Palmers Travelling Cradle & Scaffold Co., Ltd. Stephens & Carter, Ltd. Tellok Appliances, Ltd.

STEEL SHUTTERS
HASKINS "Rolador," Blackhorse Lane, Walthamstow, London, E.17.
J. TAYLOR (SYSTON), LTD., Janus Works, Albert Street, Syston, Leicester. Tel. Nos.: Syston 2133 and Manchester, Ringway 3996.

STEEL SHUTTERING
Acrow (Engineers), Ltd. Rapid Metal Developments, Ltd. Kwikform, Ltd.

STEEL STOCKHOLDERS
John Williams of Cardiff, Ltd. C. & S. Construction Co., Ltd.

STEEPLEJACKS
GRAY, J. W. & SON, LTD., Tudor House, 1, Princeton St., Bedford Row, W.C.2. Tel.: Cha 8701-2, and 13, Castle Street, Salisbury. Sal 2750.
Furse, W. J., & Co., Ltd.

STONE, GRANITE, Etc.
BROUGHTON MOOR Green Slate Quarries, Ltd., Coniston, Lancashire.
JOHN STUBBS (MARBLE & QUARZITE), LTD., MERSEY WORKS, SMITHDOWN LANE, LIVERPOOL 7. Tel.: Royal 4951.

STONE CLEANING & RESTORATION
NEONORE STONE CLEANING COMPANY, 39, BRIXTON ROAD, S.W.9. Telephones: RELiance 3111 (5 lines).
Peter Cox & Partners, Ltd. The London Stone Cleaning & Restoration Co., Ltd. Neonore Industries, Ltd. New Stone & Restoration, Ltd. Reparations-Dreyfus, Ltd. Szerelmey, Ltd.

STRUCTURAL STEELWORK
A. H. Allen (Engineers), Ltd. Austin, James & Sons, (Dewsbury), Ltd. Booth, John & Sons (Bolton), Ltd. Boulton & Paul, Ltd. Braby, F., & Co., Ltd. Braithwaite & Co., (Engrs.), Ltd. Clark, Hunt & Co., Ltd. C. & S. Construction Co., Ltd. Croggon & Co., Ltd. Dunlop & Ranken Edward Farr Ltd. Gardiner, J., & Co., Ltd. Haywards, Ltd. Jones, T. C., & Co., Ltd. Keay, E. C. & J., Ltd. Ludwell & Co., Ltd.

SURFACING COMPOSITION (CEMENTITIOUS)
Pyrok, Ltd.

SURVEYORS' INSTRUMENTS
Hilger & Watts, Ltd.

TANKING
PERMANITE, LTD., 455, OLD FORD ROAD, LONDON, E.3. ADVANCE 4477 (10 lines).
General Asphalte Co., Ltd.

TANK LAGGING UNITS
Stramit Boards, Ltd.

TANKS, CISTERNS, CYLINDERS, Etc.
Braby, F., & Co. Ltd. Braithwaite & Co. (Engrs.), Ltd. C. & M. Engineering Co., Ltd. Croggon & Co., Ltd. Edward Farr, Ltd. Farmiloe, Geo., & Sons, Ltd. Harvey, G. A., & Co. (London), Ltd. Mather & Platt, Ltd. Nicholls & Clarke, Ltd.

TAPS
Evans, F. H., & Co., Ltd.

TAPS (MIXING)
Walker, Crosweller & Co., Ltd.

TAR-PAVING CONTRACTORS
General Asphalte Co., Ltd.

TARPAULINS
BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM 21. NORTHERN 9367, 2 lines.
Boulton Scaffolding, Ltd. Clifton, I., & Sons, Ltd. Fitton, S. & J., (Tarpaulins), Ltd. Podmore Works Ltd. Smith, John, & Co., (London), Ltd.

TERRAZZO
PRECAST TERRAZZO, BILDMERCH, LTD., CATFORD, S.E.6. HIT. 4798 & LEE 0849.

TILES (FLOOR AND WALL)
STANBURYS TILING COMPANY, 42, BRADFORD ROAD, DEWSBURY.
"Accotile" Cork Co., Ltd. Allied Brick & Tile Works, Ltd. British Art Tile Co., Ltd. Armstrong Carter & Sons (London), Ltd. Carter (Brockley), Ltd. Cope & Co., Ltd. Marley Tile Co., Ltd.

TILES (ROOFING)

Eastwoods Sales, Ltd.
Essex Tile & Concrete Co., Ltd.
Marley Tile Co., Ltd.
Walley, T. E., Ltd.

TIMBER

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

Anderson, C. F., & Son, Ltd.
Bloore, W., & Son, Ltd.
Fry, W. S., Ltd.
Gliksten, J., and Son, Ltd.
Horsley, Smith & Co., Ltd.
Morris, M. A., Ltd.
Phoenix Timber Co., Ltd.
Reuben, M. & J., Ltd.
Sadd, John & Co., Ltd.
Travis & Arnold, Ltd.
Vigers, Ltd.

TUBULAR SCAFFOLDING

BOULTON SCAFFOLDING LIMITED, LONDON DEPOT, PUTNEY BRIDGE ROAD, S.W.18. VANDYKE 6551, 3 lines. WORKS: BOOTH STREET, BIRMINGHAM 21. NORTHERN 9367, 2 lines.

AND YOUNGMAN OF COURSE, Wandsworth Works, Wandsworth Road, London, S.W.8. MACaulay 2233.

PETER COX CRADLING CO., Grosvenor 2023.

Acrow (Engineers), Ltd.
Boulton Scaffolding, Ltd.
Cradle-Scaff, Ltd.
Essex Steel Scaffolding Co., Ltd.
London & Midland Steel Scaffolding Co., Ltd.
Mills Scaffold Co., Ltd.
Tellok Appliances, Ltd.
Palmer's Travelling Cradle & Scaffold Co., Ltd.
Randow Millman, Ltd.
Scaffolding (Gt. Britain), Ltd.
Steel Scaffolding Co., Ltd.
Stephens & Carter, Ltd.
Turner Scaffolding, Ltd.

TOWER CRANES DISTRIBUTORS

DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel. No.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.

Delta, (Plant), Ltd.
Record Tower Cranes (G. R. V. Briere).

VALVES (THERMOSTATIC MIXING)

Walker, Crosweller & Co., Ltd.

VENEERED PANELS

W. M. LOOMAN & CO., LTD., 26-28, TABERNACLE STREET, FINSBURY SQUARE, E.C.2. Telephone: MONarch 0803-4.

VENEERS

Gliksten, J., & Son, Ltd.

VENTILATORS

Boyle, Robert, & Son.

VENTILATING, Etc.

Boyle, Robert, & Son.
Clark, Hunt & Co., Ltd.
Colt Ventilation, Ltd.
Edward Farr, Ltd.
Greenwood's & Airvac Ventilating Co., Ltd.
Harvey, G. A., & Co., (Ldn.), Ltd.
Haywards, Ltd.
Keith Blackman, Ltd.
Newman & Watson, Ltd.

VERMICULITE

A. R. & W. CLEAVER, LTD., Wood Street, Northampton.

DUPRE VERMICULITE, LTD., TAMWORTH ROAD, HERTFORD, HERTS. Tel.: Hertford 2541, Dial HE3 2541.

Dohm, Ltd.
Pyrok, Ltd.

WALLBOARD IMPORTERS

William T. Eden (London), Ltd.

WALLBOARD MAKERS

Berite, Ltd.
Bowaters Building Boards, Ltd.
Brandt's, Wm., (Wall-ply), Ltd.
British Plaster Board, Ltd., The
Cape Asbestos Co., Ltd., The
Celotex, Ltd.
Creffield & Co., Ltd.
Gliksten, J., & Son, Ltd.
"Gyproc" Products, Ltd.
"Royal" Spencer, Lock & Co., Ltd.
Sundeala Board Co., Ltd.
Tretex Acoustics, Ltd.
"Weyroc" The Airscrew Co., & Jicwood, Ltd.

WALLBOARD STOCKISTS

Anderson, C. F., & Son, Ltd.
Fry, Walter S., Ltd.

WATERPROOFING MANUFACTURERS

SIKA, LIMITED, 82, VICTORIA STREET, LONDON, S.W.1. Tel. No.: VICTORIA 3693.

DAMP-PROOFING, LTD., "Aquarep" and Fluto ("B"), U.K. Works, Deptford, London, S.E.8. Tel.: Tideway 1486-7.

"RITO" & "RITOLASTIC," ANDREW MAXWELL DIVISION (*The Liverpool Borax Co., Ltd.*) Maxwell House, St. Paul's Square, Liverpool 3.

Berry Wiggins & Co., Ltd.
British Bye-Products, Ltd.
Byrd, A. A., & Co., Ltd.
Damp-Proofing, Ltd.
Evode, Ltd.
Grangersol, Ltd.
Kerner-Greenwood & Co., Ltd.
Dussek Bitumen & Taroleum, Ltd.
Lillington, Geo., & Co., Ltd.
Quickset Water Sealers, Ltd.
Sal-Ferracite & Trading Co., Ltd.
Sealocrete Products, Ltd.
"Stic B" Paint Sales, Ltd.
Tretol, Ltd.
Watco (Sales), Ltd.

WALL-LININGS

Stramit Boards, Ltd.

WATER HEATERS

Ascot Gas Water Heaters, Ltd.
Aidas Electric, Ltd.

WATERPROOFING EMULSIONS

British Bitumen Emulsions, Ltd.

WELDED STEELWORK

C. & M. Engineering Co., Ltd.
Edward Farr, Ltd.

WINCHES

DOE, ERNEST, & SONS, LTD., Industrial Division, Ulting, Essex. Tel. No.: Hatfield Peverel 311 (12 lines). Night Tel.: Hatfield Peverel 319.

A.C.E. Machinery, Ltd.
British Hoist & Crane Co., Ltd.

WINDOWS

Tomo Trading Co.

WINDOW FRAMES & SASHES (METAL)

Braby, F., & Co., Ltd.
Crittall Manufacturing Co., Ltd.
Farmiloe, Geo., & Sons, Ltd.
Smith Bros. (Tividale), Ltd.
Haywards, Ltd.
Luxfer, Ltd.
Mellowes & Co., Ltd.
Nicholls & Clarke, Ltd.
Wiggins-Sankey, Ltd.
John Williams of Cardiff, Ltd.

WINDOW FRAMES & SASHES (WOOD)

Austins of East Ham, Ltd.
Tomo Trading Co., Ltd.

WIREWORKERS & WEAVERS

POTTER, F. W., & SOAR, LTD., PHIPP STREET, LONDON, E.C.2.

WOOD PRESERVATIVES

Rentokil Woodworm & Dry Rot Centre
"Sidoc" Anderson, D., & Sons, Ltd.
Szerelmey, Ltd.
Watco (Sales), Ltd.

WOOD WINDOWS (DOUBLE GLAZED)

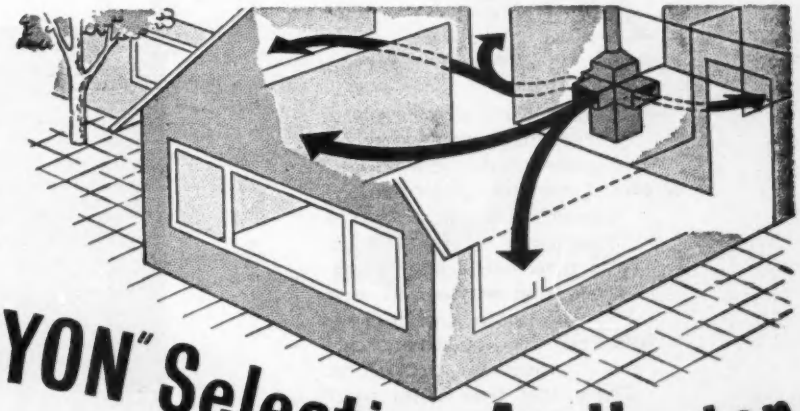
Tomo Trading Co., Ltd.

WOODWORKING MACHINERY

Danckaerts Woodworking Machinery, Ltd.

RAPID HEATING

is just one of the good reasons why more and more architects have discovered the many technical and practical advantages of the



SUGG "HALCYON" Selective Air Heater

Illustration of Halcyon Model F.45 shown with the ducting removed.

A TEMPERATURE RISE OF UP TO 20°F. CAN BE SUPPLIED TO AN AVERAGE ROOM IN ABOUT 10 MINUTES.

This "warmth where you want it" equipment presents no difficulties in installation, by simple duct system, suitable for houses, bungalows and flats.

It is compact, easy to control and economical to maintain. The HALCYON time-switch can be set to operate automatically at any required time.

CAPITAL COST UNDER £80

Choose HALCYON—for a new high standard of near-central domestic heating. Thousands already in use.

Literature and full technical details available from

WILLIAM SUGG & COMPANY LTD., 67-73, Regency Street, London, S.W.1.
Telephone: VICtoria 3211

—like our own downpours, could put you "on the horns of a dilemma" when it comes to protective covering for road work, drainage undertakings and open building sites Men and materials are fully safeguarded by John Smith weatherproof canvas products. They "hit the bulls eye" for 100% efficiency.

JOHN SMITH

TARPAULINS · SHELTERS · COLLAPSIBLE LORRY TILTS

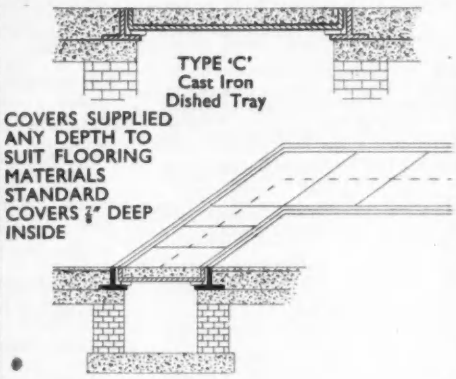
with immediate delivery

JUMBO TARPAULINS · ELEPHANT CANVAS SHELTERS · MASTODON CANVAS SHELTERS

JOHN SMITH & CO (LONDON) LTD

Hainault Works, Hainault Road, Chadwell Heath Romford, Essex
Seven Kings 6070 (10 lines)
Branch Office and Works Lower Holmes Street, Cadoxton, Barry, Glam Barry 2372

TRENCH COVERS AND BEARERS



Measurement taken on site

ASHWELL & NESBIT LTD

Head Office & Works:

BARKBY ROAD, LEICESTER
Tel.: 67151

Branches at London, Birmingham, Manchester, Leeds, Glasgow and Belfast

Yes! 10 Years ahead... The Latest RECORD 607B 707B 805A

FULLY COMPLY WITH B.S.S. 2799/56

FREE TRAVELLING CLIMBING STATIC

PATENTED HYDRAULIC ERECTING DEVICE

5 SAFETY DEVICES

ONE YEAR GUARANTEE

FREE ERECTION

4 FREE INSPECTIONS

LUBRICATION AND MAINTENANCE SERVICE AVAILABLE

24 HOURS SPARE PARTS SERVICE

TYPES	607B3	707B2	805A3
Maximum Radius	92 ft	99 ft	99 ft
Maximum S.W.L.	3 tons	5 tons	6 tons
S.W.L. at Maximum Radius	20 cwt	24 cwt	30 cwt
Lifting Speed	200 f/m	200 f/m	200 f/m
Max. Free Travelling Height	135 ft	135 ft	128 ft
Max. Height Static	500 ft	500 ft	500 ft
Max. Height Climbing	UNLIMITED		

Made by the Biggest and Oldest Tower Crane Manufacturers
Ets F. POTAIN & CO.
LA CLAYETTE (S & L) FRANCE
RECORD TOWER CRANES

Main Distributors for United Kingdom:
BRIERE (London) LTD.
56 Victoria Street, London, S.W.1
Tel.: VICtoria 4583

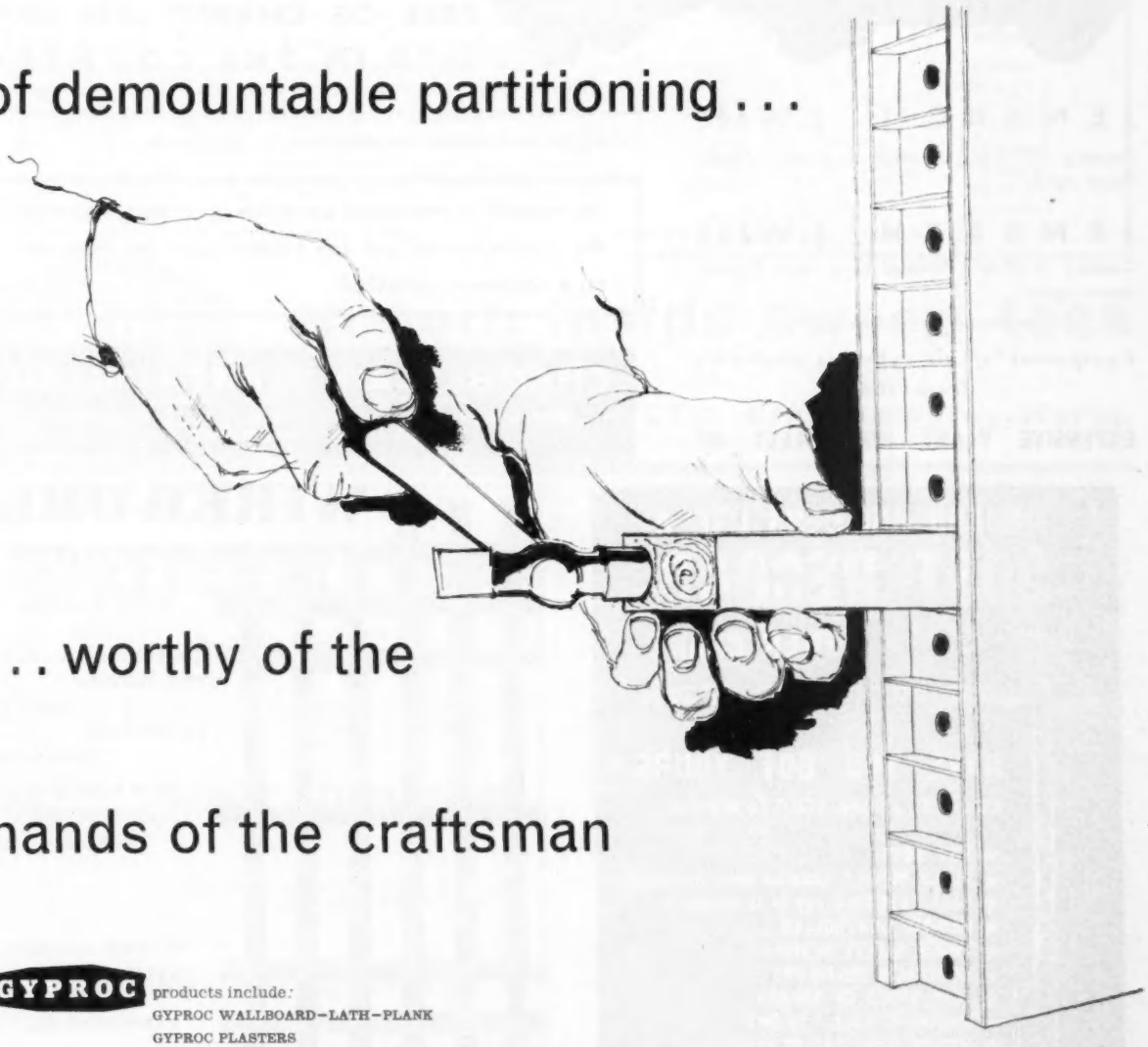
Sole Concessionaire for United Kingdom:
GRV. BRIERE
—SALES—SERVICE—SPARES—

The Most Efficient and Specialised Tower Crane Organisation in this Country

All Details, Prices and References on Request
For the Full Range (18 Different Types Available)
—Special Requirements are Undertaken—

THE RECORD CRANES
RECOGNIZED AS THE EASIEST AND FASTEST TOWER CRANES TO BE ERECTED
HIGHEST EXISTING PERFORMANCE

GYPUNIT is one of the most versatile and economical systems of demountable partitioning . . .



. . . worthy of the hands of the craftsman

GYPROC products include:

GYPROC WALLBOARD–LATH–PLANK
GYPROC PLASTERS
GYPSTELE ROOF AND WALL LININGS–SUSPENDED CEILINGS
PLAXSTELE SUSPENDED CEILINGS
GYPUNIT PANELS
GYPTONE ACOUSTIC TILES
GYPLITE READY-MIXED LIGHTWEIGHT AGGREGATE PLASTERS
GYPKLITH WOOD WOOL SLABS
Free technical literature will be sent on request

The cellular core of Gypunit Panel permits the easy insertion of wood blocks to accommodate fastenings for door frames, glazing openings, etc.

GYPROC PRODUCTS LIMITED
Head Office: Singlewell Road, Gravesend, Kent. *Gravesend 4251/4* · *Glasgow:* Gyproc Wharf, Shieldhall, Glasgow, S.W.1. *Govan 2141/3*
Midlands: 11 Musters Road, West Bridgford, Nottingham. *Nottingham 82101* · *London:* Ferguson House, 15/17 Marylebone Road, N.W.1. *Hunter 4031/4*

GU9

DEMONSTRATIONS

BY CHAMBERLAIN PLANT LTD. OF

JENBACH MOBILE COMPRESSORS

CAN BE ARRANGED ENTIRELY FREE OF CHARGE ON ANY SITE IN THE COUNTRY

They will tow a compressor to and from the site of your choice, and carry out the demonstration without any obligation.

JENBACH J.W440

Capacity 156 c.f.m. Powered by a twin cylinder diesel engine.

JENBACH J.W220

Capacity 78 c.f.m. Powered by a single cylinder diesel engine.

All Jenbach compressors are of integral design, in that the power source and compressor unit are mounted on a common crankshaft.

Equipment of all types is available from the

EXTENSIVE PLANT HIRE FLEET OF

CHAMBERLAIN PLANT LIMITED
(ONE OF THE CHAMBERLAIN GROUP OF COMPANIES)
CROWN WORKS, SOUTHBURY ROAD, ENFIELD, MIDDLESEX
Telephone: HOWARD 4994

MODERN BUILDERS USE A

205T "RECORD"

TOWER CRANE

HAVE YOU GOT YOURS?

Look at these star features

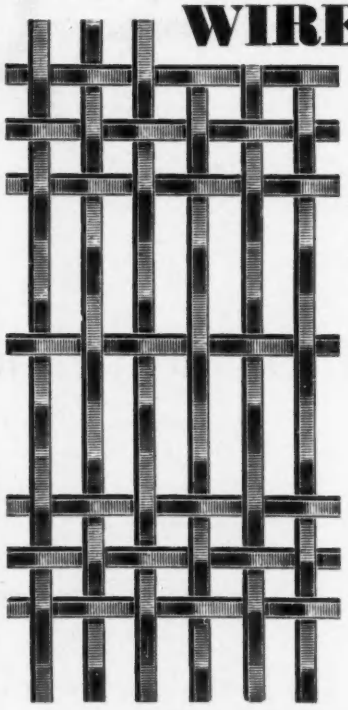
- ★ LOW COST
- ★ FULLY MOBILE (can be lorry mounted)
- ★ SELF ERECTING (up in 10 minutes)
- ★ REMOTE CONTROLLED
- ★ THREE SAFETY DEVICES
- ★ IMMEDIATE DELIVERY
- ★ FULL STOCK OF SPARES
- ★ MAXIMUM S.W.L. 10 CWT.
- ★ MAXIMUM HEIGHT 66 FEET.

For further details:
TELEPHONE ELGar 1441 or write to the MAIN U.K. DISTRIBUTORS

DELTA (PLANT) LTD. 10, CORONATION ROAD, PARK ROYAL · LONDON · N.W.10.

Cranes of larger capacity also available

WIREWORK



METAL LATTICE

WOVEN WIRE

RADIATOR GUARDS
VENTILATING GRILLES
BALUSTRADE PANELLING

in a variety of patterns and finishes.

WINDOW GUARDS
SKYLIGHT GUARDS
SCREENS
PARTITIONS &c.

Write for illustrated brochure.

F. W. POTTER & SOAR LTD.
PHIPP STREET LONDON E.C.2
TELEPHONE: SHOREDITCH 9582 (3 lines)

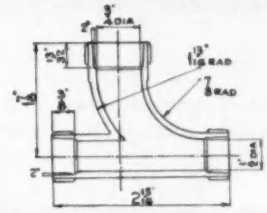
SWEEP tees that really SWEEP

For small bore (forced circulation) heating installations it is ESSENTIAL to use sweep tees and slow bends.

Compare the quality and design of " KINGLEY " sweep tees with any other ! By providing a little more metal in the casting and a lot more thought on the drawing-board, " KINGLEY " have produced a range of sweep tees which have set a new high standard in the trade.

In our new factory these fittings are made in the most modern brass foundry devoted to this class of work. Our production is higher than ever before, but quality sells, and so the demand is even greater. Look ahead for your small bore requirements and order early your SMOOTH INSIDE SWEEP TEES by " KINGLEY "—tees that really sweep !

For the technically minded :-



Available in:

½"equal
¾" x ½" x ½"
¾" x ¾" x ½"
½" x ½" x ¾"
(enlarged branch for ¾" feeds to radiators)

● Made only from virgin ingot metal

KINGLEY

smooth inside sweep tees

Write for full details and illustrated catalogue to :

KINGS LANGLEY ENGINEERING CO. LTD. Kings Langley, Herts.

Telephone : Kings Langley 4022. *Telegrams : Champion, Kings Langley.*

VENEERED PLYWOOD

WE ARE

SPECIALISTS IN VENEERING

BOARDS - PANELS - FLUSH DOORS

IN ALL SPECIES OF WOODS

YOUR ENQUIRIES ARE INVITED

CITY VENEERING MILLS Ltd.

1a KINGSWAY ESTATE,
ANGEL RD., EDMONTON,
LONDON, N.18.

Telephone: EDMONTON 6228

SYNSTRYP

PAINT REMOVER

Outstrips Everything

No faster paint stripper on the market !

★ Removes all paints, varnish, shellac, lacquer, stoved enamel, cellulose, etc.

★ Adheres to vertical surfaces

★ Water washable

★ Non-caustic non-inflammable

★ Does not injure wood or metal

Test it for yourself

Write or phone:

SYNTHITE LTD.

WEST BROMWICH·TIPTON 2245/9

A member of the Tennant Group of Companies

Well worth considering for

- Stain proofing and preserving stone masonry facings
- Cement additive for bonding
- Metal priming and colour coating for iron and steelwork
- Preserving asbestos-cement
- Bonding and hardening concrete floors
- Damp proof membranes
- Roof waterproofing
- Remedying damp walls
- Water storage tanks

with

Calcium plumbate; zinc chromate-iron oxide; asbestos-cement primers. High gloss non-bituminous protective coloured coatings (alkyd resin media). Bituminous black and coloured coatings. Mastic and semi-mastic sealing compounds. Silicone water repellents.

RITO, RITOLASTIC & ROMANITE *Products*

Send for descriptive literature

Mfrs.: ANDREW MAXWELL DIVISION (The Liverpool Borax Co. Ltd.)

Maxwell House, St. Paul's Square, Liverpool 3.

There is nothing to equal

LEAD PIPE

for close-grouped

soil and waste pipe work

LEAD DEVELOPMENT ASSOCIATION

18, ADAM STREET, LONDON, W.C.2. *Telegrams:* Leadevep, Rand, London. *Telephone:* WHItehall 4175

h

THE LEAD SHEET & PIPE TECHNICAL INFORMATION BUREAU

advises on the use of Lead in building work. Most of the many uses are detailed in the Association's publications, and in addition the Bureau's technical officers are always glad to give individual assistance.

P1/60

the new way to say

MOSAICS

Feltwood

FELTWOOD is real wood flooring—in ready-to-lay panels of ⅜" hardwood blocks indissolubly bonded to an underlay of damp-resisting felt. The mosaics cannot work loose. A heated building is not required, yet it withstands all forms of under-floor or ceiling heating.

FELTWOOD is easily laid, is available in many lovely hardwoods, has every single advantage of a traditional wood floor *plus* the damp-resistance and extra resilience the felt gives it—and it

COSTS BARELY MORE THAN SYNTHETIC FLOORING

We hold large stocks of many different hardwoods, seasoning in our yards.

MANUFACTURED BY

VIGERS

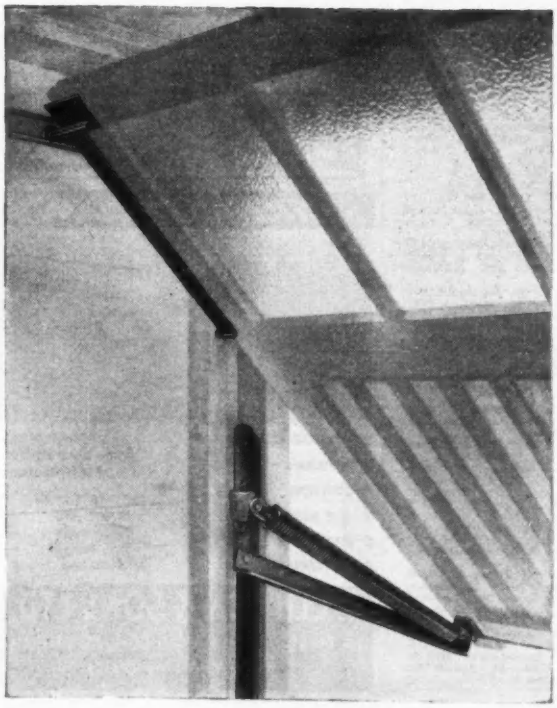
Write for leaflet FB and sample panel of Feltwood—

VIGERS BROS. LTD., Ludgate Broadway

London, E.C.4. CITy 2111 and at Belfast — Exeter — Cardiff — Birmingham

IT'S HARDLY SURPRISING...

that more and more Architects and Builders are specifying the



BATLEY

Suparise

SPRING CONTROLLED

UP & OVER DOOR GEAR

because they know that Suparise is exceptionally robust, reliable and easy to fit. Available for new installations, with a choice of Aluminium Alloy or selected Timber Doors; or for converting existing hinged doors to 'Up & Over' Doors. PRICE **£11.10.0.** (Gear only).

Alternatively complete Batley Up and Over Doors can be supplied in ribbed Aluminium Alloy (**£20**) or exterior grade Mahogany Ply (**£19**), or Roller Shutter doors in selected timber laths.

Generous Trade Terms available

Brochure from:—

ERNEST BATLEY LTD.

66g, Colledge Rd., Holbrooks, Coventry. Coventry 89245

MISCELLANEOUS ADVERTISEMENTS

Prepaid, twenty-four words, 8/6; each additional six words, 2/-. Display, 30/- (per single column inch)

FOR SALE

ENGLISH TIMBERS

For Building and Joinery Trades. Oak Planks for Cills., Half-Timbering, or scantlings to size.

GATES AND OAK DOORS A SPECIALITY

Seasoned quartered boards for Flooring, Panelling, etc. Machining done and Joinery manufactured for the Trade. Gates and Fencing.

Established 1884

WYCKHAM BLACKWELL LTD

Saw Mills:

Hampton-in-Arden- BIRMINGHAM

Telephone: HAMPTON-IN-ARDEN 3

ALL SIZES — PROMPT DISPATCH

HUTS

PODMORE WORKS

769-773 GARRATT LANE, LONDON, S.W.17

Keen Prices. Phone: WIMBLEDON 7622

EVERLASTO Sash Cord

Rotproof
Weatherproof
Non Stretch
Low Cost

JAMES LEVER & SONS, LTD.

DELPH STREET BOLTON

LADDERS
STEPS
TRESTLES
TOWERS
TRUCKS
TROLLEYS
ETC.

MACaulay 2434 (3 lines) and 2892

Cayless OF BATTERSEA

91-93 BATTERSEA PARK ROAD, LONDON S.W.8

WANTED

WANTED: ALLOY and STEEL TUBULAR SCAFFOLD, large quantities only. Sites cleared anywhere. Also all types of Non-Mechanical plant.—Contact: C. EVANS & Sons Ltd., Burnside-street, Bow, E.3. Tel.: ADVance 5691/2/3.

ARE YOU SELLING WOODWORKING MACHINERY? Then contact A. COOKSLEY & CO., 21/25 Tabernacle-street, London, E.C.2. MON 3355.

ALLOY AND STEEL SCAFFOLDING, any lengths from 5 ft. upwards. Also two site huts. Boards. Acrow props and reinforce rods. Cash on collection or delivered, to SANDERS Ltd., 18/20 Mediar-street, London, S.E.5. ROD 5143.

WANTED—SCAFFOLDING, PROPS, TRENCH SHEETING, etc., and similar items of non-mechanical builders' Plant. Sites cleared by arrangement.—PLANT & BUILDING EQUIPMENT, Ltd., Chatfield Works, 1 Chatfield-road, Battersea, London, S.W.11. Tel: BATtersea 9213.

SAW BENCH Required for building site. Price and details to THOMAS BATES & SON, Ltd. (Mr. L. R. Tuckey), Church-road, Harold Wood, Romford. Telephone Ingrebourne 42921.

FOR SALE

A.C.E. PLATFORM HOIST, 10/15 cwt., 21 ft. Tower-Petter Diesel Engine and safety device. Ready for work, £105.—Apply MOBILE HAULAGE Ltd., 230 Tottenham Court-road, London, W.1. Telephone: Langham 7833/4/5.

NISSEN TYPE HUTS for sale. Prompt despatch of 16 ft., 24 ft. and 30 ft. wide huts; also "Romney" Huts 35 ft. wide and "Blister" Hangars 86 ft. 6 in. and 91 ft. wide. These buildings are in various lengths and comprise steel framework with galvanised corrugated steel sheeting.—Full details from Dept. 129, J. THORN & SONS, Ltd., Brampton-road, Bexleyheath, Kent (Tel.: Bexleyheath 0021).

NEW SITE HUTS 2 in. x 2 in. Frames ¾ in. Shiplaped Weatherboarding ¾ in. T. and G. Floors ¾ in. Boarded and Felted Roof 8 ft. x 6 ft. £36 5s. 10 ft. x 8 ft. £49 1s. 12 ft. x 8 ft. £55. Delivered Carriage Paid 25 miles from London.—H. C. Hill, Ltd., 68/70, Penge-road, S.E.25. SYDenham 3131/5.

A NEW GIGANTIC HARDWOOD MOULDING CATALOGUE styled in Traditional, Continental and Contemporary designs, mass produced and precision made. Also EMBOSSED MOULDINGS, ORNAMENTS and DOWELS at today's lowest trade prices.—Write or 'phone DAREVE'S MOULDING MILLS, Ltd., Cassio Bridge Wharf, Watford, Herts. Tel.: Watford 24241/2/3.

FOR SALE: TRENCH STRUTS, Acrow and Kwikform. 400 No. 1, 100 No. 2, 1,000 No. 3.—Contact: C. EVANS & SONS, Ltd., Burnside-street, Bow, E.3. Tel.: ADVance 5691/2/3.

MANUFACTURERS of CONCRETE PRODUCTS, Fencing Kerbs, Flags, etc.—C. A. E. C. HOWARD Ltd., St. John's Works, Bedford. Tel.: Bedford 4204.

C. EVANS & SONS, Ltd., for first-class Scaffold Couplers, all manufactures. Expert advice given with 100 per cent. service.—Contact: C. EVANS & SONS, Ltd., Burnside-street, Bow, E.3. Tel.: ADVance 5691/2/3.

REFRIGERATION: All types of equipment, domestic and commercial, designed and manufactured to your specifications. Built-in work a speciality. Quotations free.—G. V. E. Ltd., Rose-alley, off Park-street, S.E.1. WAT 1912.

SECONDHAND SECTIONAL TIMBER BUILDINGS, 24 ft. x 12 ft., £102; 30 ft. x 15 ft., £138; 40 ft. x 18 ft., £192; 60 ft. x 20 ft., £302; floors extra, delivery included 100 miles. Also similar new buildings.—Lists, UNIVERSAL SUPPLIES, Crabtree Manorway, Belvedere, Kent. (Erith 32948.)

FOR SALE: ACROW PROPS, 1,200 Type 1X, 1,000 Type 2X.—Contact: C. EVANS & SONS, Ltd., Burnside-street, Bow, E.3. Tel.: ADVance 5691/2/3.

MOBILE LIVING UNITS AND OFFICES built to specification for Home and Overseas Contracts.—Write TRAILER HOMES, Ltd., Shannon Corner, Kingston By-Pass, New Malden, Surrey.

FOR SALE. 4 ft. 6 in. KWIKFORM UNIT SCAFFOLD, H. Frames.—Contact: C. EVANS & SONS, Ltd., Burnside-street, Bow, E.3. Tel: ADVance 5691/2/3.

PUMPS.—Sale or Hire. New or Reconditioned. Hand, Electric and Petrol-driven outfits.—THE GREENWICH PUMP & PLANT CO., Ltd., Deptford-street, Greenwich, S.E.10. Greenwich 6336.

NEW AIR PUMPS. Diesel MOBILE COMPRESSORS and Armstrong Whitworth PNEUMATIC CONTRACTOR'S TOOLS, HOSES AND ACCESSORIES from stock.—HUBERT C. LEACH, Ltd., High-street, Cheshunt, Herts. Tel.: Waltham Cross 25161.

BUILDER retiring has surplus new building materials for disposal at half trade price.—List from 160 Stanmore-hill, Stanmore, Middlesex.

SCAFFOLDING, etc., for sale. Excellent condition. SCAFFOLD FITTINGS—fully reconditioned or selected second-hand condition—all makes immediately available. PUTLOG COUPLERS from 2s.; DOUBLE COUPLERS from 3s. Used Steel and Alloy SCAFFOLDING TUBE, SHORING PROPS and TRENCH STRUTS—in excellent condition. Good used SCAFFOLD BOARDS and PUTLOGS. Personal attention to all inquiries.—SOULSBY & CO., 87 Deans-lane, Edgware, Middx. MILl Hill 4644 (or 1855) (Works: NORth 4112).

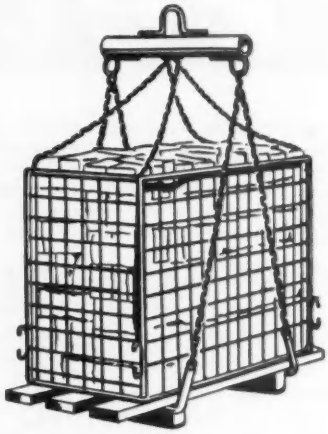
BUILDERS' PLANT—Sale or Hire. Terms arranged. Immediate delivery. Steel and Alloy Scaffolding, Fittings, Boards, Pole and Extension Ladders, Trestles, Steps, Steel Barrows, R.S.J.s, Acrow props, small concrete mixers from 3/2½ bag size, ½-yd. Drayton dumpers, Floor Sanding Machines, Road Breakers, Tarpaulins, Dust Sheets, Shearlegs, Kwikform frames, also 200 tons second-hand girders, Angle Iron, Timbers various sizes.—M. SANDERS Ltd., 18/20 Mediar-street, London, S.E.5. ROD 5143.

FOR SALE

BRICK CAGES

for loose or strapped bricks

100 or 200 brick capacity



ABELSON

& CO. (ENGINEERS) LTD.

SHELDON · BIRMINGHAM 26

Phone: SHEldon 2424 (10 lines)

Grams: ABELSON, BIRMINGHAM

ALSO AT LONDON & MANCHESTER

LADDERS FROM STOCK

STEPS · TRESTLES · BOARDS · DUST SHEETS

Price List from THE PODMORE WORKS

769 Garratt Lane, S.W.17. Tel.: Wimbledon 7622

SECTIONAL BUILDINGS

- WELFARE CLINICS
- PAVILIONS
- CANTEENS
- SITE HUTS
- STORES
- WATCHMAN'S HUTS

EVERYTHING for the BUILDER and CONTRACTOR

also CANTEEN TABLES FORMS AND EQUIPMENT H.P. Terms Available

I. CLIFTON & SONS LTD.

13, Neeld Parade, Wembley, Middlesex

Tel. WEMbley 2921

MARLEY
CONCRETE GARAGES
MAKE THE BEST

BEAUTIFULLY DESIGNED
67 Models from £55
Cash or Credit Terms
Erection Service
COAL BUNKERS
from —— £4.15.0
Free leaflets from
MARLEY CONCRETE LTD
Dept. A34 Peasmarsh, Guildford, Surrey. Guildford 90628

MASTIC SEALING AND POINTING
Whenever you require Mastic Sealing, pointing or weather proofing treatments get in touch with Expandite Limited, who can arrange for contract work to be carried out throughout the country.
EXPANDITE LIMITED
CHASE ROAD, LONDON, N.W.10 Telephone ELGar 4321 (10 lines)

ALLIED RUBBER PRODUCTS & ENGINEERING CO. LTD.

DONKEY COATS
Oilskin Clothing, Knee Boots, Clogs, Gloves, and Aprons (Rubber, Leather, Asbestos, PVC)

HOSES & FITTINGS
Delivery, Suction, Air, Oil, Acid, Water, Sandblast, Plastic Tubing, Foot Valves Strainers, Couplings, Clamps, Clips.

MATS • MATTING • FLOORING
Drain Rods, Stoppers, Diaphragms, Sheet Insertion, I.R. Strip and Extrusions, Joints, Washers, Force Cups, Squeegees, Door Stops, Mouldings, Sponge.

Rubber Manufacturers and Merchants.
93/95, SOHO RD., HANDSWORTH, BIRMINGHAM
Phone: NOR 6421-2

HARDBOARD. Best Swedish Crown or w.w. Board, 8 ft. x 4 ft. x ⅛ in., single sheets at 12s. 9d. each; 2-8 sheets at 10s. 7d. each; 9-100 sheets at 10s. 1d. each. Sizes and prices on application. Carriage paid London area only.—H. C. HILL, Ltd., 68-70 Penge-road, South Norwood, S.E.25. SYD 3131/4.

SLATES. 8,000, used, 12 in. x 6 in. Offers invited. —CASE AND SONS, 71-73 Fisherton-street, Salisbury. Phone 3741.

SAFES and STRONG ROOM DOORS, all makes and sizes, for sale and wanted. Repairs, openings, removals anywhere.—BURMANS REMOVALS, Golding-street, E.1. ROYal 3360.

FOR SALE and HIRE. All Types of NON-MECHANICAL Equipment including TRENCH SHEETS and STRUTS, SKIPS (Concrete Pouring and Circular Tipping); PROPS; SHUTTERING and FLOOR CENTRES; COLUMN CLAMPS; SCAFFOLDING and FITTINGS, etc.—PLANT & BUILDING EQUIPMENT, Ltd., Chatfield Works, 1 Chatfield-road, Battersea, London, S.W.11. Tel: BATtersea 9213.

PAIR of Solid Oak Garage Doors, approximately 10 ft. wide, complete with surround and hinges, etc. £50 or near offer. Delivered free within 25 miles radius.—Telephone Uxbridge 3444, Mr. NORMAN V. REEVES.

CAST IRON GUTTERS, Box moulded, HR., B. Wall, Valley, etc., 4 to 24 in. wide. C.I.R.W. PIPES, 2, 2½, 3, 3½, 4, 5 and 6 in. Stocks at Hanwell, W.7. Est. 1932.—HILLS BROS., 49 Queen Victoria-street, London, E.C.4. CITy 3004.

SECONDHAND ROLLED STEEL JOISTS. New Mild Steel RODS and new B.R.C. FABRICS, all available for immediate delivery from stock.—Contact A. F. SIMPSON, Ltd., 68-70 Penge-road, South Norwood, S.E.25. SYD 3131/4.

PIERCED STEEL PLANKING in prime, second-hand condition, 10 ft. 0 in. long by 15 in. wide. Approximately 65 lb. per piece. Ideal for site work at £30 per ton. Carriage paid London area or five-ton loads up to 50 miles from London.—A. F. SIMPSON Ltd., 68-70 Penge-road, South Norwood, S.E.25. SYD 3131/4.

WOOD WOOL SLABS, normal quality. 1,500 Slabs 6 ft. x 2 ft. x 3 in. for clearance. Offers.—Telephone Strood 7295.

FERRANTI DOMESTIC FRIDGE-HEATER, 1959. Cost £160.—Offers, LEAROYD, 32 Haverfield-gardens, Kew, Surrey. Richmond 5947.

LARGE AGAMATIC SOLID FUEL BOILER in excellent condition. Colour, cream. £25 or near offer. For quick sale.—MOU 6747.

KL-33 MOBILE CRANE on pneumatics, strut type jib, 3 tons capacity. £1,600. Model No. 8 LIEBHERR TOWER CRANE, can be seen working on site. £725.—CHAMBERLAIN PLANT Ltd., Crown Works, Southbury-road, Enfield, Middlesex.

SOMMERFELD TRACKING
Sound S/H. approx 25-yd rolls. 10 ft wide. reinforced every 9 in. with ⅛ in. M.S.R. £12 10s. 0d. per roll. C/P London area, or 10-roll lots throughout England.
A. F. SIMPSON, LTD.,
68/70, Penge Road,
SOUTH NORWOOD, S.E.25.
Telephone: SYDenham 3131/5

PODMORE WORKS SITE HUTS
FROM STOCK
PHONE-WIMBLEDON 7622

769-773, GARRATT LANE, SW17

SCAFFOLDING UNIT
for Building 40' x 24' (2 lifts)
Deposit £30 and 12 equal monthly payments of £9 17s. 1d.
ARTED & COMPANY LTD.
59, KINGSLEY AVENUE, HOUNSLOW, MIDDX.
Telephone: HOUnslow 1400

'BULLDOG' SHOVELS
'DREADNOUGHT' FORKS
The finest one-piece solid forged ENGLISH TOOLS made
Can be purchased from
LONDON STOCKISTS:
JOHN MACNAMARA
& Company Limited
Bush Road, Deptford, London, S.E.8
BERmondsey 3275-1436

VAST QUANTITY OF Coal Slag

SUITABLE FOR ROADMAKING AND/OR BREEZE BLOCK MANUFACTURE

And

Equal Quantity of RED ASH

Situated at

Chesterton, Staffordshire
approximately 2 miles from Proposed M.1. Extension

Write for details to:—
P. Davies Esq. 28, Berkeley Sq. London, W.1. HYD 5771/2

USED EQUIPMENT with a GUARANTEE

CHASESIDE USED EQUIPMENT DIVISION

IF YOU REQUIRE A RELIABLE USED MACHINE YOU NEED LOOK NO FARTHER THAN HERTFORD

Come and inspect our full stock, for in addition to the machines listed below, we have machines at prices to suit all requirements.

Stock No. *PRICE EX WORKS*

HYDRAULIC MACHINES

1045 1956 Loadmaster 800TC Ford 4D Diesel Engine, Cab, 1 cu. yd. Scoop. Excellent machine on good tyres. Class B warranty. Seen HERTFORD. **£1,500**

1180 1957 Loadmaster 800TC. Ford 4D Diesel Engine, Cab, Lighting, 1 cu. yd. Toothed Scoop. Good tyres, very sound condition throughout. Class B warranty. Seen HERTFORD. **£1,650**

615 1957 Loadmaster 800TC Ford 4D Diesel Engine, Cab, Lighting, 1 cu. yd. Toothed Scoop. Very good machine. Class B warranty. Seen HERTFORD. **£1,650**

1139 1956 Loadmaster 500, Ford 4D Diesel Engine, Open-sided Cab, 1 cu. yd. Scoop. Very good tyres, rears 14.00 x 24. Class B warranty. Seen HERTFORD. **£1,200**

1181 1957 Loadmaster 700, Ford 4D Diesel Engine, 'All-weather' Cab, 1 cu. yd. Scoop. Good tyres, rears 14.00 x 24. Class B warranty. Seen HERTFORD. **£1,375**

1133 1956 Weatherill 2HCRA, Ford 4D Diesel Engine. Good tyres. Class B warranty. Seen NOTTINGHAM. **£875**

1205 1954 Weatherill 2H, Ford 4D Diesel Engine, in good condition, on good tyres. Offered at a very attractive price. Class B warranty. Seen HERTFORD. **£650**

1082 1958 Loadmaster 700, Ford 4D Diesel Engine, 'All-weather' Cab. Power steering, Lighting, 1 cu. yd. Scoop. Class B warranty. Seen HERTFORD. **£1,675**

1200 1956 Loadmaster 500, Ford 4D Diesel Engine, 'All-weather' Cab, Lighting, 1 cu. yd. Scoop. Class B warranty. Seen DURHAM. **£850**

1253 1956 Loadmaster 500, Ford 4D Diesel Engine, Open-sided Cab, 1 cu. yd. Scoop. Class B warranty. Seen HERTFORD. **£1,100**

DUMPERS

D3/FO/500 1958 Chaseside 3½ cu. yd. DUMPER, Fordson Diesel Engine, Cab, Lighting, overhauled and repainted. Seen HERTFORD. **£1,000**

D5/FO/603 1958 Chaseside 4½ cu. yd. HI-SPEED DUMPER (little used). Fordson Diesel Engine, 'All-weather' Cab, Lighting, Standard Hopper, fast hydraulic discharge. Two-way steering, servo assisted hydraulic brakes on all four wheels. Excellent machine with full guarantee. Seen CARDIFF. **£1,950**

Send for full particulars to:-

CHASESIDE ENGINEERING CO., LTD.
USED EQUIPMENT DIVISION
STATION WORKS,
HERTFORD, HERTS.
Telephone: Hertford 3113-8

TAS/UED 79

NEW TARPAULINS

EXACT SIZE ONLY

JUTE, 16 oz. before green wax proofing. 12′ x 9′ each 66/-, 15′ x 12′ each 100/-, 18′ x 12′ each 115/6, 21′ x 15′ each 156/6.

FLAX, 16 oz. before green chemical proofing. 12′ x 9′ each 87/6, 15′ x 12′ each 139/-, 18′ x 12′ each 156/6, 21′ x 15′ each 215/-.

COTTON DUCK, 14 oz. before green wax proofing. 12′ x 9′ each 90/6, 15′ x 12′ each 140/6, 18′ x 12′ each 174/-, 21′ x 15′ each 252/6.

ANY QUANTITY FROM LONDON STOCK

JOHN MACNAMARA & CO. LTD
Bush Road, Deptford, London, S.E.8
BER 3275-1435

DUMPERS

for

SALE or HIRE

THWAITES ¾yd.—1yd.—1½yds.

DANDRIDGE'S of GREENWICH

The Greenwich Plant Depot
WOOLWICH ROAD, S.E.10
Tel. No.: Greenwich 6333 (4 lines)

HARDCORE

Keen rates quoted for delivery in London and Southern Counties.

W. S. WRIGHT LTD.
1, Salisbury Road, Bromley, Kent.
Phone: RAV. 1148-9

"Oliver" Open Ended Belt Sander. Rise, fall and sliding table 100 in. x 42 in.
"Wadkin" Type LD. Crosscut Machine, direct drive pullover type. Motorised 400/440/3/50.
"Pickles" Heavy Duty Spindle Moulder, multi-speed. Motorised 400/440/3/50.
"Sylvan" 10 in. Saw Bench. Motorised 400/440/3/50. Rise and fall table.
"Robinson" 36 in. Roller Feed Saw Bench. Model XP/T.Motor driven.
"White" Straight Line Edger. Table 48 in. x 60 in. Max. depth of cut 4 in. Width 24 in. Motor driven.
"Dexter" 48 in. Panel Planer and Thicknesser. Takes timber 48 in. x 10 in.
"Dexter" 5-Spindle Tenoning Machine. Motor drive for 400/440/3/50.
"White" Ball Bearing Vertical Spindle Moulder.
"Danckaert" Ball Bearing Panel Planer. Capacity 31¾x 9 in.

F. J. EDWARDS LTD.

359-361, Euston Road, London, N.W.1. Tel.: EUSton 4681 and 3771, and 41, Water Street, Birmingham, 3. Tel.: CENtral 7606-8.

ERNEST DOE & SONS LTD

Ulting, Maldon, Essex

Rotary Hoe Trencher with Ford 4D diesel engine. Good order. **£850.**
Chaseside loading shovel powered by Ford 4D diesel engine. Just overhauled. **£450.**
Dinkum Digger with Skyhi front loader, seen working. **£575.**
Trusty 1 ton diesel dumper. Working order. **£125.**
Le Tourneau 6 yd. Scraper. **£275.**
Chaseside loading shovel with P6 engine. Very good trim. **£235.**
Bray HL.20 ¾ cu. yd. Hydraulic loading shovel. Crowd action. **£650.**
May 1957 Dinkum Digger with Dozaloda. Perfect. **£1,250.**
Dinkum Digger attachment for Fordson Major, as seen. **£225.**
County Crawler with Bray Dozer. Very good order. **£850.**
Dinkum Digger with Dozaloda. Overhauled. **£1,050.**
Arps Trench Devil, self propelled Trencher. **£475.**
Ferguson Tractor with Shawnee Scout Digger and front shovel. **£650.**
Rotary Hoe Trencher. 4D diesel engine overhauled throughout. **£1,150.**
JCB Hydraulic Excavator. Giant pneumatics, front shovel. **£850.**
Bray hydraulic loading shovel ⅝ cu. yd. bucket. Seen working. **£350.**
Motor Rail Dumper spares including Dorman Diesel engine going cheap.
1959 Bray BL.430T 4 wheel drive Loading Shovel with torque convertor. **£2,450.**
Dinkum Digger. 2 buckets. Cab. Lights. Front hydraulic loader. Overhauled. **£850.**
JCB Excavator. 2 buckets. Cab. Counterweight. Rebuilt. **£895.**
Choice of 4 Dinkum Diggers. **£450 each.**
Thwaites 1½ cu. yd. Tusker Dumper. Overhauled. **£250.**
BL.430 4 wheel drive loading shovel. Immediate delivery. **£1,750.**
1957 Bray BL.25 1 cu. yd. Crawler loading shovel, rebuilt at cost of over £800, for quick sale. **£2,350.**
Several Fordson Major Diesel Tractors. Prices from **£250.**
Ford Major Diesel with Skyhi Hydraulic Loader. Overhauled. **£450.**
International T6 Crawler Tractor. Useful site Tug Tractor. **£150.**
Oliver Logging Arch on Tracks. **£235.**
Winget 5/3½ Concrete Mixer. **£45.**
Drayton 1 ton Dumper with new Petter diesel engine. **£275.**
Leeford Howlett Ditcher powered by Fordson Major Diesel. **£850.**

Ernest Doe & Sons Ltd

Ulting, Maldon, Essex

Tel: Hatfield Peverel 311 (Night 319)

FOR SALE

3 only large COMET Calor Gas Heaters
Fan type trolley mounted.

35 only ID Type Calor Gas Convector Heaters

Offers to Stores Dept.

HOLLAND & HANNEN AND CUBITTS (NORTH WEST) LTD.,
Building & Civil Engineering Contractors,
NEW CHESTER ROAD, BROMBOROUGH, WIRRAL, CHESHIRE.

ACTON PLACE, ACTON
LONG MELFORD, NR. SUDBURY, SUFFOLK

Demolition of Mansion

Large Quantities of the following materials available:—

Clean Old Red Bricks
Peg Tiles
Portland Stone
Timber and Floorboards
Oak and other doors
Floor Bricks
Antique Fireplaces
Oak Window Frames
Georgian Staircase
Brick Rubble
Rockery Stones

VIEWING BY APPOINTMENT ONLY

Telephone: Long Melford 437 **Mr. P. L. CLARK**

Ernest Doe & Sons Ltd
JCB
DISTRIBUTORS

offer for immediate delivery ex stock Croydon.
New JCB Hydra-Digga/Loadall—£2,368
Full range of buckets and extra equipment at listed prices.
All JCB Spares ex stock Croydon.
Also the following second-hand machines

JCB Hydraulic Excavator powered by Ford 4D diesel engine with cab, good tyres and 18" and 24" back acter buckets and front mounted hydraulic shovel with ½ cu. yd. bucket and dozer blade. Overhauled and resprayed. **£765.**

Dinkum Digger on Fordson Major Diesel Tractor with cab, good tyres, and 18" and 24" buckets and Skyhi front mounted ¾ cu. yd. loading shovel. Overhauled and resprayed. **£850.**

Muirhill 14B ⅞ cu. yd. Dumper powered by Perkins 4/6 diesel engine. Very good pneumatics. Overhauled and resprayed. **£575.**

Bray HL20 hydraulic loading shovel with ¾ cu. yd. crowd action bucket, powered by Ford 4D diesel engine, fitted new remould 1200 x 24 rear pneumatics, good 750 x 20 fronts. Overhauled throughout. **£750.**

Bray hydraulic loading shovel powered by Perkins P6 diesel engine with ¾ cu. yd. bucket. Good tyres. All in good working order. **£350.**

New Type Fordson Major diesel Tractor with electric starter, hydraulic lift and linkage new remould 11 x 36 rear pneumatics, good 600 x 9 fronts. Overhauled and resprayed. **£350.**

County Bulldozer, powered by Ford 4D diesel engine and fitted Bray hydraulic angledozer. This is a very good clean machine and is a bargain at **£850.**

Fiat 55L Bulldozer. Wide gauge wide tracks, fitted Mackay hydraulic angledozer. Overhauled throughout. Immediate delivery. **£1,250.**

Howard Rotary Hoe trencher, powered by Ford 4D diesel engine and fitted Rotoped tracks. Cuts drainage trenches 8" wide 42" deep, complete with pipe layer. These machines are in short supply. **£1,050.**

Get your Spares and Service from:

Ernest Doe & Sons Ltd
Therapia Lane, Mitcham Road,
Croydon, London
Phone Thornton Heath 4844, Day and Night

VITAL STATISTICS

of the New Det-On Steam Cleaner will be supplied gladly on request. In brief: within 3 minutes from cold, 900 lbs. cleaning steam per hour, or 220 imperial gallons of very hot water per hour. NOW FOR SALE, Det-On is already famous the world over for its unique ability to remove difficult industrial dirt and grease, quickly and easily. Consult us on how the Det-On can solve your cleaning problems, particularly the unusual.
Telephone or write:

WANSON COMPANY LTD.
7 Elstree Way, Borehamwood, Herts.
Tel.: ELStree 5696.

NEW SCAFFOLD BOARDS
SELECTED SWEDISH WHITEWOOD
1 to 12 Boards 1/9½d. ft. 51 to 100 Boards 1/6d. ft.
13 to 50 Boards 1/7½d. ft. 100 or over 1/4½d. ft.
WITH 1" x 20G. GALVANIZED HOOPING AND BINDING. QUANTITIES OVER 3 STANDARD PRICES ON APPLICATION DELIVERY FROM STOCK CARRIAGE PAID 25 MILE RADIUS.
H. C HILL, LTD.
68/70 PENGE ROAD SOUTH NORWOOD S.E.25.
TEL.: SYDenham 3131/4

FOR HIRE

SCAFFOLDING. Large stocks available for Hire. —SECURITY SCAFFOLDS Ltd., 92-96 Spring Hill, Birmingham, 18. Telephone No.: NORthern 4413.

THREE KW. 110V. D.C. PETROL GENERATORS for hire. Ideal for site electric lighting and power tools.—PARK-STANTON & CO., 72 Leadenhall-street, E.C.3. AVE 1416.

FOR HIRE: TUBULAR SCAFFOLDING, Scaffold Boards, Extension Ladders, Trestles, Steel Props, Tarpaulins and Dust-sheets, etc. Pumps, KANGO Hammers and Breakers.—HAINES PLANT, 72 Loudoun-road, London, N.W.8. PRimrose 3324.

FOR HIRE: TUBULAR SCAFFOLDING, CONCRETE MIXERS, SCAFFOLD BOARDS, EXTENSION LADDERS, SPLITHEADS, etc. Prompt delivery.—E. K. WILSON & SONS, Ltd., 87 Old Brompton-road, S.W.7. Primrose 3326.

PARDIX PLANT
FOR HIRE

DROTT SHOVELS, BULLDOZERS, DINKUMS, and all Contractors' plant for hire. Clearance and site preparation undertaken. Telephone: Waltham Cross 23496 and 24913.—PARDIX PLANT ENGINEERS, Ltd., 62-72 High-street, Cheshunt, Herts.

FOR HIRE: KANGO HAMMERS, KANGO BREAKERS and FLOOR SANDERS, etc.—E. K. WILSON & SONS, Ltd., 87 Old Brompton-road, S.W.7. PRImrose 3326.

ALLOY AND STEEL SCAFFOLDING, fittings, boards, Acrow type props, Ladders, trestles, Kango hammers, Dumpers, Warsop road breakers, and various other plant for immediate delivery at competitive prices.—M. SANDERS Ltd., 18/20 Medlar-street, London, S.E.5. ROD 5143.

SLOGGETTS PLANT HIRE

Dinkum Diggers—Modern Machines.—2 Burtons-road, Hampton Hill, Middlesex. Teddington Lock 1138/9.

FOR COMPRESSOR HIRE SERVICE.—Modern DIESEL MACHINES, lorry-mounted, also portable.—Telephone LEACH, Waltham Cross 25161.

YOU CAN
DRAIN YOUR SUMP WITH A
"Muckypump"
—a Petrol-Driven DIAPHRAGM PUMP FOR UNDER **£85**
GREENWICH PUMP & PLANT CO. LTD.
DENHAM STREET, S.E.10
Phone: GREENWICH 6336

PLANT HIRE SUGGESTIONS

CONCRETE BREAKING.—'H' type Kango Hammers, Univ. 210/230V. Ideal 12" concrete. Silent, trouble-free—£6.10.0 wk. Compressors—£1.0.0 hr. including Operator. Warsop Road Breakers (the self-contained concrete breaker)—£4.5.0 wk.
FLOOR SANDERS.—'Nu-Floor' 8"—£5.0.0 wk
RAMMERS.—Warsop—£5.0.0 wk.
TARPAULINS.—18' x 12'—6/- wk.
18' x 15'—7/6 ,,
CONCRETE MIXERS.—3/2 Petrol—£1.10.0 wk. (Also complete range.)
SITE HUTS.—1½d. ft. sup. wk.
WARSOP PUMPS.—2". 6,000 galls. per hr.—£4.5.0 wk.
RAILWAY SLEEPERS.—8' 6" x 10" x 5"—10d. wk.
ALSO COMPLETE RANGE OF MECHANICAL AND NON-MECHANICAL PLANT
CAMPBELL-GRAY, LTD.
68/70, Penge Rd., South Norwood, London, S.E.25
Telephone: SYD 3131 (3 lines).

3/2 MIXERS 'HALF BAG' BENFORD
FOR HIRE
30/- PER WEEK
PETROL OR ELECTRIC—1 PHASE
JOHN MACNAMARA & CO. LTD.
Bush Rd., Deptford, London S.E.8. BER 3275-1435

THE UNIQUE PLANT SERVICE

We still claim to have the most comprehensive PLANT HIRE SERVICE in this country.
We can normally supply every item of Mechanical and Non-Mechanical Plant the Builder requires between foundations and roof.

☆ ☆ ☆

OUR LORRIES DELIVER DAILY IN LONDON & ADJOINING COUNTIES

☆ ☆ ☆

SYMES (PLANT) LTD
ALBERT WORKS
BRENTWOOD · ESSEX
Telephone No.:
BRENTWOOD 2116 (5 lines)

FOR HIRE
KANGO

ELECTRIC HAMMERS

CONTRACTORS SERVICES LTD.
65, EFFRA ROAD LONDON SW2
TELEPHONE: BRIXTON 4081

dm CS. 2

MOORE'S TRACTOR SHOVEL HIRE
Drott. 1 cu. yd., New Deutz 1½ cu. yd.
Tel: TOTtenham 0401 (10 lines)

HIRE LADDERS

UP TO 80 FT. EXTENDED
TOWER LADDERS
UP TO 35 FT. WORKING HEIGHT
POLE LADDERS
UP TO 80 RUNGS
TRESTLES & STEPS
FROM
JOHN MACNAMARA & CO. LIMITED
BUSH ROAD, LONDON, S.E.8
BERMONDSEY 3275 & 1435

"YOU CAN ALWAYS **HIRE** A **GREENWICH PUMP**"
GREENWICH PUMP & PLANT CO., LTD
DENHAM STREET S.E.10
Phone: GREENWICH 6336

FOR HIRE

★ POLE LADDERS
★ TOWER LADDERS
★ EXTENSION LADDERS
★ STEPS, TRESTLES
★ BOARDS
★ CONCRETE MIXERS
and
SCAFFOLDING
of all types
★
Immediate Deliveries
★

STEPHENS & CARTER Ltd.
731-761 Harrow Rd. N.W.10.
Tel: LADbroke 1191 (7 lines)
HIGH WYCOMBE Tel: 3183
BIRMINGHAM Tel: Victoria 1226
NORWICH Tel: 47785
IPSWICH Tel: 53236
COATBRIDGE, Scotland. Tel: Coatbridge 525

CIRCULARS

A box number is a service designed to help the advertiser. It is NOT a medium for circularising. Circulars addressed to a box number will not under any circumstances be forwarded

SLOGGETTS (PLANT HIRE)
COMPRESSORS OF ALL TYPES
2 Burtons Road, Hampton Hill, Middx.
Telephone: Teddington Lock 1138/9

FOR HIRE
PAH
★ DROTT 4-in-1 Shovels
★ DINKUM DIGGERS
★ EXCAVATORS
★ COMPRESSORS
★ VIBRATING ROLLERS
★ PUMPS
ROB ROY SALES & SERVICE AGENTS
ACWORTH PLANT HIRE LTD.,
207 High Street, Waltham Cross, Herts.
Tel.: Waltham Cross 26211

ND & H
TUBULAR SCAFFOLDING AND CRADLES
CONTRACT
HIRE or SALE
Speedy Service. Competitive Prices
NICOLL, DAWSON & HUMPHRIES, LTD.
1, Southern Grove, Mile End, E.3
Tel.: ADVance 1927-4511

CASWELL Tel.: RIVerside 8922/3
CRANES
& ERECTION LTD.
GROVE WORKS, HAMMERSMITH, W.6
MANUFACTURE for SALE or HIRE
GUY DERRICKS
From 3 to 100 tons
LIFTING DERRICKS
From 1 to 100 tons—200 ft. High
WINCHES HAND or POWER OPERATED
10 tons capacity direct
BOGIES
Also **HIRE** *to any gauge for any load* SCOTCH DERRICKS
up to 15 Tons—135 ft. Jibs.
Exclusive HIRE AGENTS for ANDERSON GRICE CRANES
Birmingham Office: 156, Charles Henry Street, Birmingham 12.
Tel.: Birmingham MIDland 7063/4

FOR HIRE
EXCAVATORS
TRACTORS
TRAXCAVATORS
LOADING SHOVELS
COMPRESSORS
LIGHT DUMPERS
CONCRETE MIXERS, ETC.
H. COX & SONS
(PLANT HIRE) LTD.
33 SOUTHAMPTON WAY
CAMBERWELL S.E.5
RODNEY 2215 (4 LINES)

CONTRACTS WANTED

BRONZE METAL WORK FOR BANKS, OFFICES, ETC.
W. & R. LEGGOTT Ltd.
★
WINDOW OPENING GEAR
21, Bloomsbury Way
LONDON, W.C.1
BRADFORD & MANCHESTER

MOORE'S ROLLER HIRE
Wallis & Steevens 2½ to 10 ton.
Tel: TOTtenham 0401 (10 lines)

KITTRIDGE FLOORING LTD.

HARDWOOD
DECORATIVE
INDUSTRIAL
FLOORING SPECIALISTS

QUEENS PARK ROAD · HAROLD WOOD
ROMFORD
ESSEX

Telephone INGREBOURNE 43875/6

R. W. LOCKWOOD
"Syndal," Pipps Hill Rd., Grays Hill, Billericay, Essex
Telephone: BASILDON 217
Plastering & Granolithic Contractors
345 GREEN LANE, SEVEN KINGS, ILFORD
Telephone: SEVEN KINGS 7551

It pays to try OLDACRES* first!
Reproduction of Bills of Quantities
*OLDACRES & CO LTD
62, HATTON GARDEN, LONDON, E.C.1
OHAncery 8242

CONTRACTS WANTED

Prepaid rate, 24 words, 8s. 6d.: each additional 6 words, 2s. Display 30s. per inch s. col.

CRADLES erected on time at the right price.—Ring THE PETER COX CRADLING COMPANY. GRO 2023.

STONE Restoration and Cleaning. London or provinces. Competitive prices.—PETER COX & PARTNERS, 33 North-row, W.1. Mayfair 1306.

BRICKWORK. New, Repairs, Pointing. Greater London area.—FRENCH & BEEKE, 29 Dalberg-road, S.W.2. Brixton 5870.

E. J. WRIGHT. Plastering and Granolithic Contractor.—7 Oster-terrace, Walthamstow, E.17. Telephone: COPpermill 3021.

SITE CLEARANCE and Bulk Excavation. Competitive prices.—Apply, CAMBERWELL PLANT HIRE, Ltd., 66 Peckham-road, Peckham, S.E.15. BRI 0664.

J. A. BURWASH & SON, 89 Blackbush-avenue, Chadwell Heath, Romford, Essex. Sanitary and General Plumbing. Small Bore Heating and General Pipe Fittings. Architects' enquiries invited.—Tel.: Seven Kings 6251, evening calls accepted.

C. IZATT & SON, Ltd., PAINTING AND INTERIOR DECORATING CONTRACTS Required. Competitive prices. Members of the National Federation.—36 Orchard-road, Dagenham, Essex. DOM 4660 and MITcham 4127.

BRICKWORK SUB-CONTRACTS wanted in and around London. First-class work guaranteed at reasonable prices.—A. P. ADKIN, Ltd., 73 Crouch Hall-road, Hornsey, N.8. Mountview 2491.

JURA ASPHALTE invites inquiries for asphalt FLAT ROOFS, GUTTERS, and COLOURED FLOORS. Prompt work and keen quotations.—407 Wandsworth-road, S.W.8. MAC 3600.

SOILING, SEEDING and TURFING. Work undertaken in any part of U.K. at competitive prices.—GILLAM, Purley. UPLands 9222/6.

G. BARTER & CO., Industrial Decorative Spray and brush painters (labour only or contract). We supply equipment.—1a Whitton-way, Hounslow, Middlesex. HOUnslow 9615. SOUthall 3815.

FORM WORK. 1st and 2nd Fixings, in and around London. First-class work. Strength 30 carpenters. Fully mobile.—HAINES & SON, Ltd., 86 Atlantic-road, Brixton, S.W.9. Tel.: BRI 7260 and 2977.

PLUMBING: Sub-Contract or Contracts. South, South-West England. Maintenance schedules undertaken.—SOUTHERN PLUMBING SERVICES, Ltd., 3 Barra Hall-road, Hayes, Middx. HAYes 5603.

SITEWORKS, Footings, Drainage, Roads, Watermains, etc., Required. Qualified engineer, competent labour force, own equipment. Fully mobile.—HARRISON, Wethersfield Manor, Braintree, Essex. Tel. Shalford Green 464.

UNDERPINNING or any building work of a difficult nature.—C. GRAHAM SMITH (BUILDERS), Ltd., 26 Flint-street, S.E.17. Rodney 7626-8.

SUB-CONTRACT SHUTTERING wanted. Labour only.—F. J. VARNEY, 53 Hayday-road, London, E.16. 'Phone: ALBert Dock 3583.

ALL types of Labour Only or Labour and Material PLASTERING carried out.—'Phone: A. FRENCH, Ltd., Primrose-road, E.10. LEY 1964.

BRICKWORK, POINTING AND ALTERATIONS. Contracts Required in London and Hertford areas.—I. M. ALLAN, 1 Briarley-close, Broxbourne, Herts. Hoddesdon 2903.

SHUTTERING AND FORMWORK CONTRACTS and SUB-CONTRACTORS Required. Immediate labour available. Fully mobile.—MORGAN SHUTTERING Ltd., 15 The Shrublands, Potters Bar, Middx. Potters Bar 3015.

GOOD-CLASS CARPENTRY, Joinery, fixing contracts Required. Conversions, Alterations, new work.—For prompt quotations, ring WYFORDS, LAD 1594 or write, 64 St. Marks-road, W.10.

PAINTING & DECORATING CONTRACTORS. First-class Staff always available.—J. HASSETT & SON, 11 Nigel-road, S.E.15. NEW X 8359 and FOR 7629.

ALL TYPES CARCASSING. First and second fixing. Labour only Carpentry work. Large gang available. London and Counties.—TREK CARPENTRY CONTRACTS, 45 Carnarvon-road, Leyton, E.10. Leytonstone 4006.

ERECTION and DISMANTLING. Structural steel work and all types of prefabricated components. Speedy and efficient service.—ERECTORS, 80 Bulwell-crescent, Cheshunt, Herts. Waltham Cross 22564.

POINTING WANTED, old or new, to any amount. First-class Labour, competitive Prices.—T. MURRAY, 8 Kingsbury House, John Ruskin-street, Camberwell, S.E.5.

ALL classes of interior and exterior PAINTING and DECORATING.—ROSE-SHELDRAKE DECORATIONS, Ltd., Mordaunt Works, Shrewsbury-road, N.W.10. ELGar 5080, LEYtonstone 3963.

WANTED—PAINTING and DECORATING By Contract or Measurement. Est. 1925 All work Guaranteed to your entire satisfaction G. & H. HOUSDEN, 21, Stafford Road, Wallington. Phones: Wallington 9048 Pollards 1975

DRILLING AND FIXING
All your site fixings made by Experts using Cartridge Hammers, Air and Electric Tools. Drilling and fixing carried out for Bricklayers, Carpenters, Plumbers, Heating etc. Send your "Bill" for pricing to.
THE FIXINGS COMPANY LTD.
62, Chandos Court, Buckingham Gate, S.W.1.
Telephone ABBey 7145/6.

JAMES JOINERY
All classes of work executed.
Individual or Repetition items,
DOORS, SASHES, STAIRCASES, SHOP FITTINGS, AND SHOP FRONTS, ETC.
Sawing, Planing and Mouldings
ROMSEY WORKS
2, COMMERCIAL WAY, S.E.15
RODney 5151

CONTRACTORS WANTED

Prepaid rate, 24 words, 8s. 6d.: each additional 6 words, 2s. Display 30s. per inch. s. col.

CONTRACTORS and Suppliers interested in Contracts in Co. Durham, contact "THYSSEN," Wesleigh House, Coombe-road, New Malden, Surrey.

KEIL & VEVERS, Ltd. Require SUB-CONTRACTORS, all trades, for Office, Factory, School and Housing contracts in Surrey, Hants. and Berks.—Please write to General Manager, Poplar Works, Frimley-road, Camberley, Surrey.

BONA FIDE Brickwork and Carpentry. Labour only sub-contractors Required. Only those with large labour force and willing to enter into sub-contract agreement need apply, with details, to Box 772, "The Builder."

SUB CONTRACTORS, all trades, Required for new and alteration contracts in and around London area. Labour Only or Labour and Material.—Write, in first instance. Box 785, "The Builder."

APPLICATIONS are invited from Swimming Pool contractors to submit quotations for the erection in the school grounds of: (a) an open-air Swimming Pool 75 ft. x 36 ft. (b) a covered Pool 75 ft. x 36 ft.—Quotations should be sent as soon as possible to the Chairman of the Governors, c/o ASTLEY COUNTY GRAMMAR SCHOOL, Yew Tree-lane, Dukinfield.

PARTNERSHIPS, PRACTICES, ETC.

A GOOD opportunity exists in Limited Building Company for active PARTNER (either sex) as Secretary/Office Manager. The Company is at present engaged on conversion, repair and decoration work which shows good possibilities of expansion with additional capital. Applicants must be of good character, cost conscious and prepared to work jointly as a team. Capital required £2,500. Sleeping partner considered. For further particulars apply in confidence to Box 649, "The Builder."

CONSTRUCTION MANAGER seeks appointment leading to directorship. Experience covers small works to industrial projects.—Box 690, "The Builder."

YOUNG CHARTERED QUANTITY SURVEYOR in North-West seeks JUNIOR PARTNERSHIP. Anything considered, willing to work hard in position that gives scope for advancement.—Box 699, "The Builder."

CHARTERED QUANTITY SURVEYOR seeks Partnership with established professional firm or other Surveyor contemplating commencing private practice. Northumberland, Durham area.—Box 752, "The Builder."

TANTIVY TILES LTD
WINDMILL ROAD, W.4
Tel. CHISWICK 3611
Specialists in
LUXURY BATHROOMS
HOUSING SCHEME & INDUSTRIAL
FLOOR AND WALL TILING

DESIGNERS

REINFORCED CONCRETE DESIGNERS and DRAUGHTSMEN with knowledge of Building Construction, Required by pre-cast concrete specialists at their head office near Guildford. Varied work with good prospects, superannuation, etc. Salary by arrangement according to qualifications and experience.—Apply to The Senior Structural Engineer, MARLEY CONCRETE Ltd., Peasmarsh, Guildford, Surrey.

PLUMBING DESIGNER/DRAUGHTSMAN Required by Architects for Specialists' Department. Interesting work, congenial conditions and realistic salary. —Write, Box 729, "The Builder."

A NEW DESIGN GROUP is being formed by West End Architects. ARCHITECTURAL DESIGNERS wanted immediately who will have excellent prospect leading to senior positions in the organisation. Only people with outstanding design ability and enthusiasm should apply. There are also vacancies for intermediate and qualified ASSISTANTS. Pension scheme available, holiday commitments honoured. Salary immaterial, to be agreed according to ability. —Applications, in writing, to H. A. HALPERN & ASSOCIATES, Chartered Architects and Town Planning Consultants, Cumberland Chambers, 7 Edgware-road, London, W.2.

DRAUGHTSMEN

SHOPFITTING DRAUGHTSMAN Required. Practical and design ability. Permanency and good salary for suitable applicant.—Apply O. PETERSON Ltd., 51 Stamford-hill, N.16.

SANITARY ENGINEERING DRAUGHTSMAN for S.E. London area. Capable of setting-out schemes under minimum supervision.—Write full details, age, experience and salary required, Box 682, "The Builder."

SANITARY ENGINEERING DESIGNER-DRAUGHTSMAN (Senior Grade) Required by NORMAN & DAWBARN, Architects & Consulting Engineers, 7 Portland-place, London, W.1.

ALUMINIUM CURTAIN WALLING, Entrances, etc. CHIEF DRAUGHTSMAN to take responsibility for development and detailing departments with this rapidly expanding Company. This is a post carrying a high salary and executive prospects.—Write full details stating age, experience and salary required, to the Managing Director, AJAX ALUMINIUM Ltd., London, S.E.26.

REINFORCED CONCRETE DETAILER AND DRAUGHTSMAN Required. Five-day week, non-contributory pension scheme and bonus in operation. —Apply by letter to INDENTED BAR & CONCRETE ENGINEERING CO., Ltd., 171 Victoria-street, London, S.W.1.

DRAUGHTSMAN Required by firm of architectural decorators. Knowledge of period an advantage.—Apply, in writing, giving experience, G. JACKSON & SONS, Ltd., Rathbone Works, Rainville-road, Hammersmith, W.6.

SHOP-FITTING DESIGNER DRAUGHTSMAN

good artist, experienced detailing.
Commencing £900 per annum.

Box No. 501, "The Builder"

STOREFITTING TECHNICAL DRAUGHTSMAN Required. Must be experienced in the planning, detailing and coloured perspectives of shopfronts and interior fittings, etc. Salary by agreement. Bonus, canteen facilities.—Apply, by letter, giving details of experience, to Managing Director, HICKMAN, Ltd., North Circular-road, London, N.W.2.

JUNIOR DRAUGHTSMAN Required for Mayfair office of property development company.—Apply stating age, experience and salary required, to Box 626, "The Builder."

SENIOR DRAUGHTSMEN Required for high-class Joinery Manufacturers. Applicants should be capable of designing and detailing complete schemes. Perspective drawing an advantage. Permanent appointments with excellent working conditions and Pension scheme.—Write, stating experience and salary required, to Box 663, "The Builder."

DRAUGHTSMAN Required for Precast Concrete and Cast Stone detailing. Progressive positions and good salaries, bonus and superannuation scheme.—STENT PRECAST CONCRETE Ltd., Chequers-lane, Dagenham Dock, Essex. Tel.: DOMinion 0971.

ARCHITECTURAL DRAUGHTSMAN Required by company giving "all-in" service of design and construction on wide variety of industrial and commercial building projects. Owing to continued expansion, we have a vacancy for a DRAUGHTSMAN with experience and initiative. Working conditions and prospects are good.—Details of age, experience and approximate salary, to INDUSTRIAL DEVELOPMENT & CONSTRUCTION, Ltd., Industrial House, Stratford-upon-Avon.

QUANTITY SURVEYORS

ASSISTANT Required to maintain library of information sheets etc., and also to investigate the uses, methods of application and costs of (new) materials. Need not necessarily be qualified but Taking-off experience essential.—Please send particulars to BASIL A. COHEN, 60 Berners-street, London, W.1.

QUANTITY SURVEYOR of Intermediate R.I.C.S. standard Required for West End office of Chartered Surveyor. Good terms and conditions.—Applications to CECIL F. BAKER, 20 Lowndes-street, S.W.1, marked "Private."

CHARTERED QUANTITY SURVEYORS urgently Require the following staff for offices in London and Harrogate: Senior and Junior TAKERS-OFF, Senior and Junior WORKERS-UP.—Apply, Box 503, "The Builder."

AUSTRALIA. Vacancies for TAKERS-OFF. See advert. under heading "Overseas Appointments."

QUANTITY SURVEYOR, well experienced, Required for site measurements, preparing interim valuations and final accounts on all classes of Building and Civil Engineering work. Pension scheme in operation.—Write, in confidence, stating age, experience and salary required, to General Manager, Constructional Department, CAWOOD WHARTON & CO., Ltd., Southlands, Harrogate, Yorkshire.

CHARTERED QUANTITY SURVEYORS, Victoria-street, Require qualified TAKER-OFF, also ASSISTANT, Intermediate standard, for working-up etc. Good opportunities in both positions on varied and interesting work. Details and salary required to Box 618, "The Builder."

QUANTITY SURVEYOR Required for busy contractor's office in Manchester. Experience in taking-off, interim certificates and estimating. Details of age, qualifications, experience and salary required. Current licence necessary as transport provided.—Box 641, "The Builder."

SENIOR ASSISTANT QUANTITY SURVEYORS Required for professional office in North East England. Large programme of varied work ahead. Applicants must have wide experience in all branches of Quantity Surveying. Salary scale £880-£1,220 according to experience. Non-contributory pension scheme after probationary period.—Apply, stating age and experience, to Box 670, "The Builder."

CHARTERED QUANTITY SURVEYOR has vacancy for ASSISTANT about Inter. standard. Sound basic technical training essential, with ability to apply this to interesting and varied work. Study towards Final standard will be encouraged. Letters only to GEO. CHEESMAN, F.R.I.C.S., 8 Brunswick-place, Leeds, 2.

FIRM of Chartered Quantity Surveyors Require a top grade Chartered QUANTITY SURVEYOR who has at least three years' experience in carrying out cost planning and control, to deputise for principal and take control of group of work. Age group 30-35.—Full details please, in confidence, including salary required, Box 771, "The Builder."

QUANTITY SURVEYOR Required by firm of Chartered Quantity Surveyors in Warrington area. Applicants should be able to undertake all Quantity Surveying duties, with the minimum supervision, including the preparation of final accounts. Experience of measuring electrical and mechanical services would be an advantage.—Reply, stating age, qualifications, experience and salary required, to Box 770, "The Builder."

ASSISTANT QUANTITY SURVEYOR Required by Civil Engineering Contractors. Permanent appointment. Superannuation scheme, and Luncheon vouchers.—Write, giving full details of previous experience, etc., to J. L. KIER & CO., Ltd., 7 Lygon-place, Grosvenor-gardens, London, S.W.1.

SITE MEASURING SURVEYOR Required by Chartered Quantity Surveyors for measuring electrical installations.—Applications, by letter, stating age, experience, salary required, etc., to FRANK N. FALKNER & PARTNERS, Chartered Quantity Surveyors, Windscale Works, Seascale, Cumberland.

QUANTITY SURVEYOR Required by firm of Chartered Quantity Surveyors in site office at Port Talbot, Glamorgan, for long-term contract. Rented accommodation available.—Apply, stating age, experience and salary required, to Box 787, "The Builder."

SITE QUANTITY SURVEYOR for long-term contract at Newport, Mon., Required by firm of Chartered Quantity Surveyors. Rented accommodation available.—Apply, stating age, experience and salary required, to Box 788, "The Builder."

QUANTITY SURVEYOR

required by

NATIONAL COAL BOARD—
EAST MIDLANDS DIVISION

We have a vacancy for a young Quantity Surveyor who should be an associate of the R.I.C.S. and have at least one year's subsequent practical experience in all aspects of the work in a Quantity Surveyor's office. The commencing salary would be within the scale £815 x £30—£1,125.

Applications giving details of age, qualifications and experience to:—

Divisional Chief Staff Officer, National Coal Board, East Midlands Division, Sherwood Lodge, Arnold, Nr. Nottingham,
quoting S.V.1041R.

QUANTITY SURVEYOR

required as soon as possible by long established firm of Building Contractors. Permanent oppointment for suitable applicant. Superannuation scheme in operation. Duties include interim valuations measurement of variations and all work up to Final Accounts. Apply in writing stating age, experience and salary required to

Stone & Co. (Bristol) Ltd.
Redland Road, Bristol 6.

QUANTITY SURVEYORS.

Preferably qualified, or nearly so, in expanding Quantity Surveying Section, for progressive position offering unique and excellent opportunities. Capable of all aspects of Quantity Surveying on contracts where successful applicants would be given full control to act on own initiative. Five day week, luncheon vouchers (or equivalent) and Pension Scheme. State age, experience and salary required, endorsing the envelope "PRIVATE AND CONFIDENTIAL" to

CHIPPINDALE & EDMONDSON,
CHARTERED ARCHITECTS,
EMPIRE HOUSE, PICCADILLY,
BRADFORD 1, YORKSHIRE.

Keen young

ARCHITECTURAL DRAUGHTSMEN

required for an expanding Department of a

Major Motor Manufacturer

in the South Midlands to work the re-planning of Distributors' and Dealers' premises throughout the world. Opportunity to gain experience in a new and ever increasing specialist field.

Box No. 708, "The Builder."

TAKER-OFF/MEASURING SURVEYOR. Vacancy in Swansea/Llanelly site offices of firm of Chartered Quantity Surveyors.—Please apply, stating age, experience and salary required, to Box 789, "The Builder."

ASSISTANT QUANTITY SURVEYOR Required by S.W.16 London building contractors to measure sub-contractor's accounts, site measurements, bonus surveying.—Apply, stating age, experience and salary required, to Box 557, "The Builder."

QUANTITY SURVEYOR. Experienced ASSISTANT Required for large Contract in N.W. England. Good salary and prospects.—Details of age, experience and salary required, to Box 808, "The Builder."

ASSISTANT QUANTITY SURVEYOR (Intermediate Standard) Required in small but busy Quantity Surveyor's office in Hereford for preparation of Bills of Quantities, measurement on site and settlement of Final Accounts.—Reply, stating age, experience and salary required, to Box 742, "The Builder."

TAKER-OFF/MEASURING SURVEYOR Required by Chartered Quantity Surveyors for site office, North Kent.—Please write, stating age, experience and salary required, to Box 790, "The Builder."

THE LYON GROUP

REQUIRE

QUANTITY SURVEYORS

to work on large industrial and domestic developments including multi-storey structures. Knowledge of estimating desirable. The positions offer tremendous opportunity for men who can produce results with a Company which is one of an expanding group.

Non-contributory Pension Scheme, bonus and attractive salary. Please write to the

Chief Surveyor,
Ronald Lyon Construction Ltd.,
Lyon Road, Hersham, Walton-on-Thames, Surrey.

J. M. JONES & SONS LTD.

require

Quantity Surveyor

This is an additional and a senior appointment. Assistance with housing if necessary. Staff Pension and Life Assurance Schemes. Apply stating age, details of general education and training qualifications if any, brief details of present and previous appointments, and commencing salary required, to the Secretary, **J. M. Jones & Sons Ltd., Highway Works, Maidenhead.**

TAYLOR WOODROW CONSTRUCTION LIMITED

require

QUANTITY SURVEYORS

for Building and Civil Engineering Contracts. Excellent opportunities. Pension Scheme.

Write giving full details of past experience and present employment which will be treated in strict confidence to

Personnel Manager
345 Ruislip Road,
Southall, Middx.

SURVEYOR

Ford & Walton Ltd. require a Builders Surveyor fully experienced in taking off quantities, interim applications and the preparation of final accounts and able to work completely on his own initiative

Employment will be at Stratford E.15 until January 1961 when the company is moving to new headquarters being built at Wembley Park, Middx.

Application in own handwriting stating age, experience, qualifications and salary required are invited from men between the ages 25 or 30 and should be sent to Chief Surveyor

Ford & Walton Ltd.,
Walton House,
Warton Road,
Stratford, London, E.15.

SURVEYORS

MEASURING SURVEYOR on W.D. Schedule Required by Chartered Quantity Surveyors.—Apply, MESSRS HARRIS ROURKE & SIMPSON, City Chambers, 35 Catherine-street, Salisbury, Wilts.

SURVEYOR Required by progressive Building Company for interesting and responsible work in London area. Capable of dealing with contracts from enquiry to final account. Excellent prospects. —Write, stating age, experience and salary required, to STIRTON PARTNERS, Ltd., 871 High-road, Finchley, London, N.12.

SURVEYOR Required for Premises Department of City insurance company. Age 22-25. Competence in preparation of specifications, working drawings for alterations, etc. essential. Non-contributory pension scheme. Five-day week.—Full particulars of experience, etc., and salary required, to Box 497, "The Builder."

SURVEYOR Required in West End office to prepare Specifications, Schedules and Plans for small works and alterations. Ability to carry out structural Surveys an advantage. Opportunity available to obtain Quantity Surveying experience if desired. Salary according to experience.—Apply, by letter only, giving full particulars of career, to CYRIL I. SILVER, F.R.I.C.S., 42 Baker-street, W.1.

MEASURING SURVEYOR/TAKER-OFF for London Quantity Surveyors, able to handle Interim Valuations, Deviations and Final Accounts. Must be willing to travel. Salary according to experience and ability.—Box 934, "The Builder."

ORDERING SURVEYOR Required for busy contractor's office in Manchester. Must be able to take-off materials from drawings. Details of age, experience and salary required.—Box 640, "The Builder."

SITE SURVEYOR Required by firm of Quantity Surveyors, Westminster. Starting salary £1,000 for the man with the requisite experience and qualifications. Luncheon vouchers.—Apply Box 935, "The Builder."

BUILDERS' SURVEYOR Required, conversant Site Measuring and Valuations, for medium-size London company.—Write stating age, salary, experience, Box 644, "The Builder."

MEASURING SURVEYORS Required for Valuations, Final Accounts and Taking-off Materials for ordering.—Apply to A. T. ROWLEY (LONDON) Ltd., Cambridge Works, Lordship-lane, N.17.

MEASURING SURVEYORS Required by Chartered Quantity Surveyors for work in Cardiff-Bridgend area. Five-day week. Details of age, experience and salary required to Box 692, "The Builder."

LONDON firm of Chartered Quantity Surveyors Require a MEASURING SURVEYOR for their office in the Midlands. Varied contracts. Experience in valuations for interim certificates and preparation of final accounts. Five-day week. Details to Box 704, "The Builder."

BUILDING SURVEYOR. JUNIOR CHARTERED SURVEYOR Required as Assistant by Consultants advising Insurance Companies on risks of subsidence from building operations. Good prospects for man willing to learn under partner of old-established City firm.—Write, stating experience, age and commencing salary required to Box 713, "The Builder."

ASSISTANT BUILDING SURVEYOR, age about 25, Required for old-established medium-sized Building Contractors, S.E.1 district. Good salary and prospects.—Applications should be submitted in writing stating age, experience, salary required, etc., to Box 716, "The Builder."

EXPERIENCED COST AND BONUS SURVEYORS Required immediately for work mainly in the London area.—Apply stating age, experience and salary expected to Ref. DJB, Building Division, HOWARD FARROW Ltd., Highfield-road, Golders Green-road, N.W.11.

BONUS SURVEYOR Required for large London Contract. Good prospects and salary for experienced man. Pension scheme.—Apply Planning Officer, THE UNIT CONSTRUCTION CO., Ltd., Central Way, Feltham, Middlesex. Telephone FEL 5751.

JUNIOR SURVEYOR Required by B. & C. E. Contractor's office, Dagenham area, as assistant to Surveying Department.—Write full details to Box 3978, "The Builder."

MEASURING SURVEYOR (A.R.I.C.S. preferred) Required by London firm of Quantity Surveyors. 5-day week. Pension and Life Assurance scheme. Salary £1,650 per annum. Car provided.—Write, stating age and experience, Box 799, "The Builder."

HOUSING TRUST (W.C.2) Requires SENIOR ASSISTANT BUILDING SURVEYOR (25/35) (A.R.I.C.S. preferred) mainly for work in connection with modernisation programme. Salary according to age and experience.—Write, full particulars, to Box 802, "The Builder."

GUILDFORD ARCHITECTS have vacancy for accurate and experienced SURVEYOR/DRAUGHTSMAN to undertake general draughting duties and to perform dimensional surveys, with levels, of building sites and existing structures.—Write, stating age, experience and salary required, to SCOTT BROWNRIGG & TURNER, 32 London-road, Guildford.

SITE MEASURING AND COSTING SURVEYORS

required for bridges contract near Grantham. Opportunities to travel later, staff appointment pension fund etc Age 21 to 30. Previous site experience essential and knowledge of standard methods of measurement important. There is an additional vacancy on a contract near Stevenage. Apply in confidence to Contract Labour Department, **Simon-Carves Limited,** Cheadle Heath, Stockport, Cheshire, quoting reference SC.88.

TERSONS LIMITED

require experienced

SURVEYORS

for work in North London and in the London area generally.

Excellent prospects for keen men.

Apply in confidence, stating details of experience to:—

The Secretary,
Tersons Limited,
4, Dollis Park, London, N.3.

WILLIAM WILLETT (CONTRACTORS) LTD.

Competent

MEASURING SURVEYORS

required in London Office, capable of working up to and including final accounts. Apply in writing giving age, details of education, experience and salary required to

Sloane Square, S.W.1.

G. E. WALLIS & SONS, LIMITED

require

SURVEYOR/ESTIMATOR

for Maidstone Office. Applications giving details o age, experience and qualifications to: The Secretary, **G. E. Wallis & Sons, Ltd., 231, Strand, W.C.2.**

SURVEYOR

Competent Building Surveyor required. Fully experienced in taking off quantities, interim applications and the preparation of final accounts. Post is permanent and pensionable.

Write giving details of personal history to :—

F. DEFTY, ESQ.,
KIRK & KIRK LIMITED,
Atlas Works, 287 Upper Richmond Road, Putney, S.W.15.

SURVEYORS

An opportunity exists with national contractor offering promotion and advancement to suitable applicants for the following positions :—

SENIOR SURVEYOR
MEASURING SURVEYORS

Required initially for large building contract in West London. Experienced in measurement for all trades for final account, and measuring and settling sub-contractors' accounts. Able to work with minimum supervision.

Apply in writing to
Box No. 525 'The Builder'

LESLIE & Co. Ltd.

invite applications immediately for

MEASURING SURVEYOR

for their Basildon, Essex area office
and

BONUS SURVEYOR

based at London head office.

These posts carry an attractive salary, good annual bonus and non-contributory pension scheme. Apply to:

The Secretary,
Leslie & Co. Ltd.,
Peel Street, Kensington, W.8.

DEREK CROUCH (Contractors) LIMITED

Station Road, Birtley, Co. Durham

require the following staff for their Building and Civil Engineering Departments.

(a) MEASURING SURVEYOR with wide experience of site measuring. Interim and Final Accounts etc.

(b) BONUS COST SURVEYOR capable of taking full control of all bonusing and costing.

(c) BUYING/PLANNING ASSISTANT preferably Surveyor trained with experience of taking off, scheduling and buying materials and some planning and programming experience.

All posts are permanent and with excellent prospects. Reply in confidence stating experience, age, salary required and post applied for to Area Manager, Derek Crouch (Contractors) Limited, Station Road, Birtley, Co. Durham.

SENIOR SURVEYOR

required by

A. E. SYMES LTD.

Must be fully capable of dealing with sub-Contractors, interim applications, variations and final accounts on all types of contracts. Good salary and working conditions. Pension and life assurance schemes.

Write in first instance with full details to:—

Chief Surveyor,
236-252, High Street,
Stratford, London, E.15.

SURVEYOR Required by B. & C. E. Contractors, Dagenham area, capable of measuring and preparing accounts up to £500,000.—Write, giving details of experience and salary required, to Box 3977, "The Builder."

TWO EXPERIENCED

BUILDING SURVEYORS

required for progressive Builders and Contractors for interesting and responsible work mainly in the London area. Capable of assisting in the management of large contracts from enquiry to final account. Apply in writing,

Richardson, Herbert House, Slade Green, Erith, Kent.

Bonus Surveyor

urgently required
for large contract
in W.C.1. area
Good Wages & bonus

Box No. 762, "The Builder"

SURVEYORS

Progressive appointments open with London Contractors on varied types of Contracts.

Apply in writing stating age, experience and salary required.

A. T. CHOWN & CO. LTD.
CHILWORTH STREET, W.2.

Building Estimator/Surveyor

Opportunity for progressive, energetic, experienced man about 25/35, in substantial Builders/Decorators, Kingston, Surrey. Estimate to final account, including site supervision. Salary range £800/1,000 to commence. Holiday this year. Pension. Send full details in strict confidence to :—

Box. No. 731 "The Builder"

Lavender, McMillan (Cntrs.) Ltd.

require

Measuring Surveyors

Applications are invited for the above position. Applicants should be capable of taking off quantities, site measuring, preparation of valuation and the settlement of Sub-Contract accounts. There are two positions open — one at Head Office and one at Oxford. Apply in writing to The Secretary **Lavender, McMillan (Cntrs.) Ltd., 54 Cheam Common Road, Worcester Park, Surrey** stating age, experience and salary required.

ASSISTANT SURVEYORS

ASSISTANT SURVEYOR, age 20-25, Required by Company engaged on private housing development on sites in South Midlands. Position is for personal assistant to Area Manager at site office in Banbury. The work will include general office administration, certification of accounts and some minor estimating and preparation of invoices. Excellent opportunities for keen young man interested in progressing with Company.—Reply stating age, previous experience and salary required to Box 617, "The Builder."

ASSISTANT SITE SURVEYOR Required for Contractors in West London area. H.N.C. standard desirable.—Apply, stating age, experience and salary required to SHERMAN & CO. (EALING) Ltd., 14 Alexandria-road, W.13.

A **UNIQUE OPPORTUNITY** occurs in W.1 Chartered Quantity Surveyor's office for an ASSISTANT, aged about 28, with approximately 5 years' experience after qualification.—Box 757, "The Builder."

ASSISTANT SURVEYOR

Required by West End Building Contractors for measuring bonus work and as General Assistant to Senior Surveyor.

Good opportunity to widen experience on the £30,000 to £80,000 type of building contract.

Annual bonus on results and Pension Scheme.

Please reply to **Box No. 740 'The Builder'.**

MARLEY CONCRETE LTD.

require an

ASSISTANT SURVEYOR

for their Guildford Branch, to deal with sub-contracts for site works. Experience in supervising on site would be an advantage. Write, stating age, experience and present salary to:

STAFF MANAGER,
THE MARLEY TILE CO. LTD.,
RIVERHEAD, SEVENOAKS, KENT

A. J. WAIT & CO., LTD.

require

ASSISTANT SURVEYORS

for Contracts in the London and Home Counties area. Permanency and prospects for the right applicants.

Apply in writing, stating age, training experience and salary required to :

Chief Surveyor,
Wellington Crescent,
New Malden, Surrey.

ASSISTANT BUILDING SURVEYOR or BUILDING DRAUGHTSMAN Required by Chartered Surveyors in South East London, having two or three years' practical experience in building construction and preparation of plans. Good opportunity for further experience.—Write, stating age and salary required, to Box 733, "The Builder."

JUNIORS

YOUNG MAN Required to take up the post of JUNIOR with a firm of Chartered Quantity Surveyors with offices in Gray's Inn. Excellent opportunity for person interested in this profession.—Please reply, giving age, and details of education, to Box 679, "The Builder."

TAKERS OFF

CHARTERED Quantity Surveyor (London, W.1) Requires competent TAKERS-OFF. Highest salary for suitable applicants. Varied and interesting contracts.—Write, stating age, experience and salary required, to Box 190, "The Builder."

TAKER-OFF Required with not less than 2 years' experience in Taking-off. Some unusually interesting contracts. Please state age, experience and salary required.—BASIL A. COHEN, 60 Berners-street, London, W.1.

JUNIOR TAKER-OFF Required by West End Chartered Quantity Surveyor. Salary £800 to £900 p.a.—Reply in writing stating age and experience to Box 979, "The Builder."

TAKER-OFF Required by West End Chartered Quantity Surveyor. Salary £1,000 to £1,200 p.a.—Reply in writing stating age and experience to Box 984, "The Builder."

SENIOR TAKER-OFF Required by West End Chartered Quantity Surveyor. Salary £1,200 to £1,500 p.a.—Reply, in writing, stating age and experience to Box 961, "The Builder."

EXPERIENCED TAKER-OFF Required by Westminster Quantity Surveyors for responsible post. Excellent prospects. Lunch vouchers. Five-day week.—Write stating age, experience and salary required to Box 991, "The Builder."

JUNIOR TAKER-OFF Required by Central London firm of C.Q.S. (A.R.I.C.S. preferred). Salary £750-£950. L.Vs. Five-day week and holiday this year.—Box 982, "The Builder."

SENIOR and JUNIOR TAKERS-OFF Required by West End Chartered Quantity Surveyors for permanent staff.—Write, stating age, experience and salary required, to Box 908, "The Builder."

EXPERIENCED TAKER-OFF Required in West End London Quantity Surveyor's office.—Reply stating age, experience and salary required to Box 521, "The Builder."

AUSTRALIA. Vacancies for TAKERS-OFF. See advert. under heading "Overseas Appointments."

EXPERIENCED TAKER-OFF Required by firm of Quantity Surveyors, Westminster. Starting salary not less than £1,200 and according to qualifications and experience, with good prospects. Salary reviewed regularly. Luncheon vouchers.—Apply Box 933, "The Builder."

TAKER-OFF of Final standard Required by Chartered Quantity Surveyor, in W.1. Small practice but considerable variety and experience offered. Holiday plans honoured.—Write, giving details, to Box 633, "The Builder."

SENIOR TAKERS-OFF and WORKERS-UP Required in Sheffield and Manchester offices of a London firm of Chartered Quantity Surveyors. The appointments offer opportunities for good prospects in respect of promotion and salaries to suitable applicants.—Reply, in first instance, stating age, qualifications, experience and salary required, to Box 674, "The Builder."

TAKER-OFF, Final standard, Required by Chartered Quantity Surveyors, W.C.2 area.—Reply stating age, experience and salary required, Box 709, "The Builder."

YOUNG, ambitious TAKER-OFF, with some knowledge of estimating and at least 8 years' experience in a Quantity Surveyor's office. Required as PERSONAL ASSISTANT to partner and chief estimator in connection with large industrial project. Good prospects. Commencing salary £1,200 per annum, plus overtime.—Box 553, "The Builder."

TAKER-OFF Required, recently qualified or final standard, £1,000/£1,100 per annum basic commencing salary or according to experience. Holiday arrangements respected.—V. J. MENDOZA, A.R.I.C.S., 138 Gloucester-place. PAD 4527.

TAKER-OFF, Final standard, Required by medium-size Chartered Quantity Surveyors. City area. Salary according to age and experience.—Box 718, "The Builder."

LONDON CHARTERED QUANTITY SURVEYORS Require qualified TAKER-OFF with about five years' taking-off experience. Salary £1,250 plus overtime. Opportunities for overseas tours. Holiday arrangements honoured.—Write, giving age, details of education and professional experience, to Box 732, "The Builder."

SENIOR and JUNIOR TAKERS-OFF and SITE MEASURING SURVEYORS Required in Manchester professional office. Five-day week, overtime and superannuation.—Apply, stating age and experience, to Box 730, "The Builder."

BASILDON, ESSEX. E. C. HARRIS & PARTNERS have vacancy for experienced TAKER-OFF at their Basildon office.—Please apply, Head Office, 7-12 Tavistock-square, W.C.1. EUSton 8431.

SENIOR ASSISTANT Required by London firm of Chartered Quantity Surveyors. Salary up to £1,450 per annum according to age and experience. L.V.s. Five-day week. Overtime paid and pension scheme.—Please apply to Box 791, "The Builder."

JUNIOR TAKER-OFF Required by firm of Chartered Quantity Surveyors in London (A.R.I.C.S. preferred). Salary £750/£950. Luncheon vouchers. Pension scheme. Overtime paid.—Please write, stating age and experience, to Box 792, "The Builder."

SENIOR TAKER-OFF (A.R.I.C.S.) Required for permanent position in office of London Quantity Surveyors. Salary £2,000 per annum. Pension and Life Assurance scheme. 5-day week.—Write, stating experience and age to Box 798, "The Builder."

SENIOR TAKERS-OFF, aged approximately 30 years and TAKERS-OFF, aged approximately 25 years, Required by London Quantity Surveyors at their branch office at Epsom. Applicants should be qualified or qualifying and should state age, experience, qualifications and salary required. Normal office hours are 9 a.m. to 5.30 p.m. five days a week. Luncheon vouchers are provided and car mileage allowance is paid for business travel.—Box 777, "The Builder."

TAKER-OFF approaching Final examination standard Required in Quantity Surveying section of West End Architects' office. Write stating age, experience and salary required.—Box 809, "The Builder."

EXPERIENCED TAKER-OFF/MEASURING SURVEYOR Required for large civil engineering contract on South Coast near Kent/Sussex border.—Apply, stating age, experience and salary required, to Box 795, "The Builder."

MANCHESTER.—London Quantity Surveyors Require experienced TAKER-OFF for interesting work in the North-West area. Five-day week. Superannuation scheme after trial period.—Box 945, "The Builder."

WORKERS UP

WORKER-UP Required by firm of Quantity Surveyors, Westminster. Five-day week and Luncheon Vouchers. Good prospects and opportunities for the right man.—Apply stating age and experience to Box 980, "The Builder."

SENIOR WORKER-UP for London Quantity Surveyors.—Write stating age, details of experience and salary required, to Box 953, "The Builder."

EXPERIENCED WORKER-UP Required by firm of Chartered Quantity Surveyors in West End, London.—Reply stating experience, age, salary required to Box 931, "The Builder."

WORKER-UP Required. Salary range £620 to £950 according to age and experience. Compulsory superannuation. Five-day week.—Apply R. C. Steel, A.R.I.B.A., Chief Architect, C.W.S. Ltd., 99 Leman-street, E.1.

TAKER-OFF

SIMON-CARVES LTD

require for their Building and Civil Engineering Department a

TAKER-OFF

Applicants must have at least two years taking-off experience. Age 25 and over. This post is permanent and pensionable. The starting salary depends on experience and qualifications and will be in the range of £850—£1,000 p.a. Good working conditions. Five day week. Three weeks' annual holiday. Send brief relevant details to Staff & Training Division, SIMON-CARVES LTD., Cheadle Heath, Stockport, Cheshire, quoting ref. VP. 56.

UNIQUE OPPORTUNITIES EXIST

WHERE ? IN WORTHING AND BIRMINGHAM.

WHO FOR ? YOU ! IF YOU ARE A GOOD WORKER UP OR TAKER OFF.

WHAT SHALL I DO ? WRITE NOW TO BOX 623, "THE BUILDER."

WHY ? OPPORTUNITIES ONLY KNOCK ONCE AND HERE IT IS.

WORKERS-UP Required, Senior and Junior for office of Chartered Quantity Surveyors in the Holborn area.—Box 913, "The Builder."

WORKERS-UP Required, Senior and Junior. Five-day week and pension scheme.—Apply, giving particulars of experience and salary required, to OSWALD E. FARRATT & PARTNERS, Adelaide House, London Bridge, E.C.4.

EXPERIENCED WORKER-UP Required in West End London Quantity Surveyor's office.—Reply stating age, experience and salary required to Box 522, "The Builder."

EXPERIENCED WORKER-UP Required for permanent situation in London professional office. Basic salary up to £1,000 per annum.—Box 552, "The Builder."

MANCHESTER. Experienced WORKER-UP Required by professional firm for site office on large industrial contract. Commencing salary up to £700 per annum.—Box 614, "The Builder."

PERMANENT vacancy for an experienced WORKER-UP with firm of Quantity Surveyors, Westminster. Five-day week. Luncheon vouchers. Salary according to qualifications and experience and reviewed regularly.—Apply Box 936, "The Builder."

WORKER-UP with at least 2 years' experience Required. Five-day week, luncheon vouchers and pension scheme. Details of age, experience and salary required to F. B. BRYDEN & PARTNERS, 33 Catherine-place, S.W.1.

WORKER-UP Required by Chartered Quantity Surveyors near Holborn. Not less than 3 years' experience. Good salary to the right applicant, also opportunity for promotion. Five-day week. L.Vs. —Write with details to Box 703, "The Builder."

WORKER-UP Required by Chartered Quantity Surveyors near Victoria Station. Salary about £850 according to experience. Luncheon vouchers. Five-day week.—Write full particulars to Box 711, "The Builder."

PART-TIME WORKERS-UP Required.—Reply, stating experience and rate per hour required, Box 720, "The Builder."

WORKER-UP, having at least 18 months' working-up experience in a professional office, Required by West End Quantity Surveyor.—Reply, stating age, experience and salary required, to Box 632, "The Builder."

WORKER-UP for long-term contract at Newport, Mon., Required by firm of Chartered Quantity Surveyors. Rented accommodation available.—Please apply, stating age, experience and salary required, to Box 793, "The Builder."

WORKER-UP. Vacancy in Swansea/Llanelly site offices of firm of Chartered Quantity Surveyors.—Please apply, stating age, experience and salary required, to Box 794, "The Builder."

EXPERIENCED WORKER-UP Required by London firm of Quantity Surveyors. Salary £1,000 per annum. Pension and Life Assurance scheme. 5-day week.—Write, stating age and experience, Box 800, "The Builder."

WORKERS-UP Required, both Junior and Experienced, for Quantity Surveyor's office in South Kensington. Good prospects. Luncheon vouchers. Five-day week.—Box 805, "The Builder."

URGENTLY REQUIRED, two young capable, energetic and enthusiastic WORKERS-UP, for permanent posts in busy South Bucks Branch Office of London Quantity Surveyors.—Box 773, "The Builder."

SENIOR WORKER-UP Required by West End Chartered Quantity Surveyors.—Write, stating age, experience and salary required, to Box 806, "The Builder."

QUANTITY SURVEYORS. Experienced WORKERS-UP Required by old-established London firm who will pay good salary to the experienced Surveyor. Five-day week, Superannuation scheme, etc.—Write Box 697, "The Builder."

ENGINEERS

ENGINEER, to take charge of site investigations and soil mechanics laboratory. Required by Consulting Engineers in Westminster. Excellent opportunity for well qualified, energetic man to secure pensionable post.—Box 664, "The Builder."

PLUMBING ENGINEER, with good experience of design, estimating and supervision. Required by well-known London firm of Sanitary Engineers. Permanent and pensionable position for suitable applicant.—Apply, in confidence, giving details of age, past experience and salary required, to Box No. PE. 3635, A.K. ADVTG., 212a Shaftesbury-avenue, London, W.C.2.

SENIOR and JUNIOR SITE ENGINEERS Required for contracts in the north of England.—Reply, stating age, experience, qualifications and salary required, to WM. EAVES & CO., Ltd., Vicarage-lane, Blackpool.

ENGINEER, capable of designing all classes of reinforced concrete structures. Required by INDENTED BAR & CONCRETE ENGINEERING CO., Ltd., 171 Victoria-street, London, S.W.1.—Apply, by letter only, giving full details of experience.

ENGINEERS

ENGINEERS required for large contract shortly to commence in West London. Applicants must be used to accepting responsibility and working with maximum accuracy.

Excellent opportunity for promotion and advancement for the suitable applicants.

Apply in writing to

Box No. 526 'The Builder'

THE LONDON FERRO-CONCRETE CO. LTD.

BONUS ENGINEER

Applications are invited for the above position from Work Study Engineers, Surveyors, or other applicants with experience of operating bonus schemes in the building and civil engineering industry.

The successful candidate will be responsible for developing a new bonus scheme for various sites throughout the country.

Applications shall be addressed to

The Contracts Manager,
Maxted Close,
Hemel Hempstead, Herts.

WORK STUDY ENGINEER

required by progressive South London Company of Building & Civil Engineering Contractors. Must have some experience in method study and work measurement, to join a well established team using and supplementing synthetic standards for materials handling, plant, design and pre-tender research. H.N.C. or L.I.O.B standard—age 24-30. Pension scheme—free Life Insurance and assistance with housing if necessary. Please write stating experience and salary required to

Box No. 706 "The Builder"

Applications are invited for appointments to the permanent staff of a major building and civil engineering contractors from

SENIOR PLANNING ENGINEERS

with extensive knowledge of reinforced concrete work and experience of pre-estimate planning and detailed programming of large building and structural engineering works.

CIVIL ENGINEERS

preferably qualified and with good experience of planning, temporary works design and/or experience of heavy civil engineering construction.

The appointments offer excellent prospects with good salary and conditions.

Please send full details to Box No. A.A. 3629, A.K. Advtg., Ltd., 212a, Shaftesbury Ave., London, W.C.2.

ESTIMATORS

ESTIMATOR/SURVEYOR Required for Builders and Contractors. Good prospects, pension scheme and excellent working conditions.—Write, stating age, experience and salary required, to BAILEYS (BUILDERS & CONTRACTORS), Ltd., 2a Albert-road, New Malden, Surrey.

EXPERIENCED ESTIMATOR Required by Yorkshire firm of Building Contractors. Good opportunity with progressive company. Pension scheme in operation.—Write, stating age, experience and previous employers, and salary required, Box 510, "The Builder."

ESTIMATOR Required for Small Works Department. Must be fully experienced in Site Measurement all Trades, taking-off and pricing from Drawings and Specifications and preparing Interim Certificates and Final Accounts.—Apply, in writing, stating age, experience and salary required, to GRACE & MARSH, Ltd., New Bridge Works, Waddon, Croydon.

HELICAL BAR & ENGINEERING CO. LTD.

have vacancies in their Design Office for experienced

ENGINEERS DETAILERS & JUNIOR DRAUGHTSMEN

The heavy demand for Helibond cold-worked reinforcement together with the construction of R.C. Frames, is creating wonderful opportunities for men with initiative, energy and drive.

Salaries offered

Engineers—£1,300 upwards
Experienced Detailers—£1,000 upwards others according to age and experience.

University Graduates will be considered for some of these positions.

5 day week operating—L.V's. This year's holiday arrangements honoured.

Apply in writing giving full details of age and experience to:—

HELICAL BAR & ENGINEERING CO. LTD.
82, Victoria Street, London. W.1.

ESTIMATOR

Required immediately, an experienced Estimator for major building works. The appointment is permanent, pensionable and will carry a good salary. Applicants should give brief details of personal history to :—

F. DEFTY, ESQ.,
KIRK & KIRK LIMITED,
Atlas Works, 287 Upper Richmond Road, Putney, S.W.15.

CIVIL ENGINEERING ESTIMATORS

A leading building and civil engineering contractor wishes to appoint an additional estimator to the civil engineering department.

Applications are invited from men aged about 35 who have had good experience of estimating for all types of civil engineering construction. The appointment offers excellent scope for progress in an expanding section of a large organisation and has good salary and conditions.

Please send full details to Box No. CE.3617, A.K. Advtg., Ltd., 212a Shaftesbury Ave., London, W.C.2.

ESTIMATOR/SURVEYOR

required by progressive firm N.E. London. Excellent prospects for suitable applicant. Apply in writing, stating age, experience and salary required to

Box No. 921 "The Builder"

ESTIMATOR Required for the Insulation Division. Candidates must have experience of all aspects of thermal and acoustic ceiling work from enquiry to final account. Age 25-35. Pension scheme, bonus, and car provided.—Apply, in writing, to Ref. RWG, THE PHOENIX TIMBER CO., Ltd., New-road, Rainham, Essex.

NATIONAL ROOFING SPECIALISTS have an interesting, responsible, superannuated position vacant for an ESTIMATOR in their London office. Five-day week, free lunches.—Write details of age, experience and commencing salary required to Box 707, "The Builder."

JOINERY ESTIMATOR for factory in N.W. London. Non-contributory pension scheme, canteen facilities. —Details of past experience, present salary, age and copy references to Box 717, "The Builder."

YOUNG ESTIMATOR Required in small contracts department of old established City Building Contractor, to work under supervision of Senior. Vacancy would be attractive to ambitious man desiring change with prospects leading to pensionable position on permanent staff.—For further particulars telephone ROYal 7993, ask for Mr. Thorpe.

ESTIMATOR Required by FORD & WALTON, Ltd. Applicants must be fully experienced and have a sound knowledge of modern building methods. Employment will be at Stratford, E.15, until January, 1961, when the Company is moving to new headquarters being built at Wembley Park, Middlesex. —Application, in own handwriting, stating age, experience and salary required, to Personnel Manager, FORD & WALTON, Ltd., Walton House, Warton-road, E.15.

WALL and FLOOR TILING. ESTIMATOR and SURVEYOR wanted with previous experience of high-grade Contracts in London area.—Apply, in writing, stating age and details of experience and salary required, to Secretary, PRATT (WATFORD), Ltd., Woodford-road, Watford, Herts.

W. J. SIMMS SONS & COOKE Ltd. have a vacancy in their Birmingham office for an ASSISTANT to the ESTIMATOR. The position is permanent and offers scope to a young man with a good Quantity Surveying experience. Superannuation scheme is operative, and successful applicant will be invited to join after satisfactory probationary period.—Apply in writing stating age, experience and salary required to 133 Marshall Lake-road, Shirley Solihull, Warwickshire. Envelope should be marked "Private and Confidential."

ESTIMATOR/SURVEYOR Required immediately. Applications are welcomed from young men between the ages of 25-35, who have had a thorough training and experience in estimating for contracts up to £100,000 in value and the settlement of final accounts. A staff pension and Assurance scheme is in operation. Salary £1,000-£1,500 per annum, according to ability.—Applicants should write giving brief details of general and technical education and experience to DEARSLEY & CARTER Ltd., 91/93 King-street, Hammersmith, W.6.

ESTIMATOR SURVEYOR Required by large London Builders. Must have had experience in measuring sub-contractors all trades and dealing with variations. Excellent opportunity for young man with some knowledge of preparation of small estimates. Situation permanent and pensionable, alternative Saturdays free.—Reply stating age, experience and salary required to Box 810, "The Builder."

ESTIMATOR Required by FORD & WALTON, Ltd. Small Contracts Department for estimates up to £25,000. Employment will be at Stratford, E.15, until January, 1961, when the Company is moving to new headquarters being built at Wembley Park, Middlesex.—Application, in own handwriting, stating age, experience and salary required, to Personnel Manager, FORD & WALTON, Ltd., Walton House, Warton-road, E.15.

ESTIMATOR Required by Holborn firm of Builders, pricing to final account. An opportunity exists for the right man to take complete charge under the Directors and to share in the profits.—Replies, in confidence, stating age, present salary, present or former employers, to Managing Director, Box 807, "The Builder."

YEOMANS AND PARTNERS LTD.

Require an

ESTIMATOR/SUPERVISOR

for alterations and good class decorations. The applicant should be aged about 30 and have had some years of experience with a West End of London Firm.

A high standard of estimating experience and ability to organise contracts up to £10,000 in value is required.

We operate an annual bonus scheme and non-contributory Pension arrangement.

Will applicants please state their age and give chronological list of experience, training and positions held and address replies in confidence to Mrs. Wright at **44 Upper Berkeley St., London, W.1.**

GALBRAITH BROS. LTD.

require

ASSISTANT ESTIMATORS

for permanent and progressive positions at both London and Crayford Offices. Applicants should have sound knowledge of building up prices and would work directly under supervision of Chief Estimator.

ASSISTANT SURVEYORS

for permanent progressive positions at Crayford Office. Applicants should be capable of taking off quantities, site measuring, preparing valuations etc., and should preferably have knowledge of planning and cost control of contracts.

Apply in writing to Crayford Bridge, Crayford, Kent, stating age, experience and salary required.

CIBA (A.R.L.) LIMITED

wish to appoint

A BUILDING ESTIMATOR

The Company is a modern Chemical Company manufacturing synthetic resins. The Estimator will be responsible for the preparation of estimates, bills of quantities and contracts for Civil Engineering and building work of all descriptions for works to the value of approximately £5,000.

The post offers exceptionally good prospects of advancement and the general conditions of work are excellent. These include a five-day week, contributory pension scheme, etc.

Applicants, who must have had previous experience in similar work, should write giving full particulars, to Mr. Egli, **CIBA (A.R.L.) LIMITED,** Duxford, Cambridge. The salary payable will be discussed at an interview and will depend on age, qualifications and experience.

ESTIMATOR/SUPERVISOR

required for Building and Decorating firm in West Middlesex. Specialising in alterations and decorations up to £5,000. Must be able to work on own initiative. Car driver preferred. Write, stating age, experience and salary required, to:

Box No. 196, "The Builder"

LOVATT, WOLVERHAMPTON

ESTIMATOR

We have a vacancy in our Estimating Department at Wolverhampton for an experienced Estimator age 30 years or over. Previously employed by similar company and experienced in estimating for major building works. The appointment is permanent and will carry a good salary with pension scheme, etc. Applications will be treated in strict confidence and should be addressed to the

Personnel Manager,
Wilson Lovatt & Sons Ltd.,
Clarence Street, Wolverhampton.

BUILDING ESTIMATOR

Richard Costain Limited

have a vacancy for an

ASSISTANT ESTIMATOR

whose duties will comprise:—taking-off, abstracting, billing and pricing under supervision for tenders for work in the Middle East. At least 5 years' previous experience of this type of work is required. There are opportunities for service overseas at a later stage if desired. Preferably 23-28.

Please write to:—

Personnel Officer,
111, Westminster Bridge Road,
London, S.E.1.

YEOMANS AND PARTNERS LTD.

Require a

SENIOR ESTIMATOR

for Building works up to £100,000 in value. We think the right man for this job should be aged about 30/35 with concentrated experience on this range of contract, preferably with two or three firms only.

The successful applicant would be able to share in the prosperity he creates. There is an annual bonus on results. We operate a non-contributory Pension Scheme.

Please send details of age, early training, positions held and salary range contemplated. Address replies in confidence to Mrs. Wright at **44 Upper Berkeley St., London, W.1.**

TAYLOR WOODROW GROUP

require

BUILDING ESTIMATORS

Candidates should have had at least 5 years experience in estimating for all forms of building contract works.

Positions will be tenable in Southall and Ealing offices of the Group.

Opportunities will occur for candidates to serve overseas at a later date.

Excellent conditions of service, pension scheme, etc.

Write in confidence to:
The Personnel Manager
TAYLOR WOODROW (Overseas) LTD
Western House, Western Avenue, Ealing, W.5
giving full particulars

THE TAYLOR WOODROW GROUP

Applications are invited from capable

BUILDING ESTIMATORS

To work in the London Offices situated at Southall and Ealing on varied and interesting tendering for all forms of building contract work in the United Kingdom and Overseas.

Write, giving brief details of personal history, to:—

Personnel Manager,
Taylor Woodrow Services Limited,
Western House, Western Avenue,
EALING, London, W.5

ESTIMATORS
SENIOR & ASSISTANT

Required immediately. Must be fully experienced in pricing all types of B. & C.E. Works. Pension and Life Assurance Scheme. Apply full details, age, experience, salary required, to :—

Managing Director,
F. R. HIPPERSON & SON LTD.,
Invicta House,
Dagenham, Essex.

CROUDACE LTD.

have a vacancy for a

PLANNING ASSISTANT

whose duties will include the preparation of material and labour schedules, various types of production control documents and the placing of subcontract orders. The position is permanent and a pension scheme is operated.

Applicants between 24 and 28 years of age, preferably L.I.O.B. or with H.N.C., should have a knowledge of quantities, costing and modern production and planning methods.

Please apply giving full details of training and experience together with salary required to

General Building Division,
97, Godstone Road, Caterham, Surrey.

MANAGERS

CONTRACTS MANAGER. A vacancy exists in a medium-size London Contractors for an energetic and experienced CONTRACTS MANAGER. The appointment offers excellent prospects. Work is mainly in the London area.—Box 683, "The Builder."

CONTRACTS MANAGER Required by progressive Building and Civil Engineering Company in Liverpool area. Top salary offered to keen, energetic man able to get results. Previous experience in this capacity essential. Car provided.—Apply in strict confidence to Box L323, LEE & NIGHTINGALE, Liverpool.

SHOPFITTING MANAGER Required with the ability to administrate a small shopfitting concern, dealing with all matters from representation, estimating, etc., to final accounts. An experienced, energetic man with good personality is essential and will be well awarded for his efforts.—Box 612, "The Builder."

JOINERY MANAGER

to take full control of expanding (30 operatives at present) West Riding Works dealing mainly with high quality purpose made joinery. Must be capable estimator. Attractive salary and conditions. Full details to **Box 665 'The Builder'.**

SENIOR CONTRACTS MANAGER. To take charge of Contracts Dept. of Yorkshire Building Contractors. Applicants should be between 35 and 50 with extensive experience in the management of contracts up to £500,000. An exceptional opportunity for an energetic manager able to produce results.—Full particulars to Box 636, "The Builder."

JOINERY WORKS MANAGER. Progressive and pensionable position offered to person with experience of operating modern methods of management and controlling the manufacture of high quality and purpose made joinery. Applicant will be required to take full charge of old-established Building and Civil Engineering Contractors' joinery department, and must be experienced estimator. Works situated South London area.—Apply stating age, experience and salary required, Building Manager, Box 696, "The Builder."

CONTRACTS MANAGER for S.E. London Plumbing Company.—Write full details age, experience, qualifications, salary required, Box 700, "The Builder."

ASSISTANT MAINTENANCE MANAGER — RICHARD SHOPS Ltd. wish to appoint to this responsibility an enthusiastic man (aged 25-35) living in London area, who is capable of acting on his own initiative and possessing a first-class working knowledge of shop fittings, building repairs and decoration. Ability to drive essential and must be prepared to travel throughout the country. Progressive salary. Holiday arrangements respected. —Apply in strict confidence to Personnel Manager, 364-366 Kensington High-street, London, W.14 (Western 8161).

CONTRACTS MANAGER age 25/35 Required by old-established firm of Building Contractors. Position offers good prospects and is pensionable after probationary period. Qualifications should include some previous experience of site supervision and contracts management and A. or L.I.O.B. or H.N.C. —Write brief details of education, experience and salary required to HAMMOND & MILES Ltd., Scrafton-road Works, Ilford.

SENIOR ASSISTANT QUANTITY SURVEYOR, aged about 30, with all-round experience. Required as OFFICE MANAGER in small busy professional London (S.W.1) office. Permanent position. Salary commensurate with experience.—Reply with full particulars to Box 786, "The Builder."

Contracts Manager

Required by well known firm of Building and Civil Engineering Contractors, engaged primarily upon large building projects, **to take full control of Contract Manager Department.**

Only young live man fully experienced with zest for work should apply with background of similar experience.

Value of yearly turnover approx. £2,000,000.

Salary up to £3,000 per annum will be offered to suitable candidate. The opportunity of a seat on the Board of Directors after a period of two years is possible.

Write in the first instance stating age, whether married, educational and technical training received, qualifications, and present position held.

Box No. 759, "The Builder"

MANAGER—Plastering Dept.

RICHARD COSTAIN (CONSTRUCTION) LIMITED wish to appoint a Manager to control their plastering department; the duties will involve planning and tendering.

Candidates, aged 35-45, must have completed a recognised apprenticeship and possess a City and Guilds certificate. A minimum of 10 years' experience is required, including at least 5 years in a supervisory capacity. This experience should include—Estimating, Design, Taking Off, Control of site production and Measurement; an all round interest in building is also essential.

Please address applications to :—

SENIOR PERSONNEL OFFICER

111, WESTMINSTER BRIDGE ROAD

LONDON S.E.1

BUILDING MANAGER

An opportunity occurs for the appointment in the rapidly expanding provincial organisation of a National Contractor for a Building Manager.

The appointment calls for a man between 35-50 years with a wide experience in controlling the largest type of building and industrial contracts and securing results both as to progress and economics.

The post carries a high salary, will be permanent and pensionalbe and may lead to advancement.

Applicants who consider they have the necessary experience, drive and initiative and who have occupied a post of similar importance and responsibility should write in confidence in the first instance to

MANAGING DIRECTOR
c/o Box No. 801 "THE BUILDER"

LESLIE

& Co. Ltd.

require in their London office a

CONTRACT MANAGER

Applicants must be experienced in the control of contracts of at least £100,000. This post offers very good prospects for a competent man with drive, initiative and personality, interested in modern management techniques and who can produce results.

The position carries an attractive salary, good annual bonus and non-contributory pension scheme. The company operates on a large scale throughout the country with branch offices in Scotland, Darlington, Bradford, Basildon and Hemel Hempstead.

Apply, giving full particulars, to ; the Secretary, **Leslie & Co. Ltd., Peel St., Kensington, W.8.**

BUYERS

BUYER Required by house manufacturers in the West Surrey area. Must be prepared to accept responsible position and have a good knowledge of the building trade. This is a first-class opportunity to enter a progressive company pioneering a new industry.—Please give full details of age, education, experience and present salary, to Box 669, "The Builder."

Y. J. LOVELL (SUSSEX), Ltd., Require a **BUYER** experienced in placing orders and sub-contracts.—Write, stating age, experience and salary required, to Y. J. LOVELL (SUSSEX), Ltd., Bishopric, Horsham.

ASSISTANT Required in Builders' Buying Department. Experience essential in inviting tenders from Sub-Contractors from B.Qs. Age 30-50.—Apply in writing with full details of previous experience and salary required to RUSH & TOMPKINS Ltd. (Ref. RVE), 109 Station-road, Sidcup.

The Davies Construction Company (Kent Ltd.)

invite applications for post of

BUILDING MANAGER

for expanding development programme. Must be estimator trained & have sound practical knowledge of cost control, supervision and Management. Replies in confidence to

Box No. 784, "The Builder"

CLERKS OF WORKS

UNIVERSITY OF SOUTHAMPTON. Applications are invited for the post of ASSISTANT to the Resident Clerk of Works. Applicants should have practical knowledge of building construction and estimating together with some drawing experience. Salary scale £525 rising by annual increments of £20 to £625 per annum, with possibility of extension to £675. Superannuation scheme.—Applications, in writing, giving full particulars of age and experience, together with the names of two referees, to the Secretary and Registrar, The University, Southampton. Closing date August 22, 1960.

CLERK OF WORKS Required for new Commonwealth Institute in Holland-park, Kensington (approximate value £½ million), to start in September, 1960. Reinforced concrete construction with large span paraboloid roof.—Apply in writing to the Architects, ROBERT MATTHEW AND JOHNSON-MARSHALL, 24 Park-square East, N.W.1, not later than 23rd August, 1960.

CLERK OF WORKS. Applications are invited for the above appointment in connection with the erection of the superstructure for the new head office extensions for the LEEDS AND HOLBECK BUILDING SOCIETY, Albion-street, Leeds. The building is five stories high, with basement and sub-basement. There are also to be extensive alterations to the adjoining and present head offices. The appointment will be for a period of approximately 2 years commencing early September.—Applications, stating age, experience, qualifications, present salary and salary required, together with the names of two referees, to be addressed to: R. T. Clough, A.R.I.B.A., GRIBBON & FOGGITT, Chartered Architects, 3 Park-place, Leeds, 1.

CLERK OF WORKS with wide experiepce will be required shortly for large commercial undertaking in the Manchester area. Applicants should give references, experience and state own trade, age and salary required to HARRY S. FAIRHURST & SON, F/A.R.I.B.A., 55 Brown-street, Manchester 2.

CLERK OF WORKS Required by CORPORATION OF LONDON for Market Repainting Contract, approximately 8 months' engagement.—Write, stating age, experience, salary required, etc., to City Surveyor, Guildhall, E.C.2.

CLERK OF WORKS Required early September for Church in course of erection at Whitehaven, Cumberland. Competent and experienced men only please apply, with references, age, salary, and when free, to W. C. MANGAN, Architect, 2 Ribblesdale-place, Preston.

YOUNG MAN Required by large residential property company in London area to train as CLERK OF WORKS. Preferably some experience in specification writing, estimating, supervision of maintenance and small works. Early promotion and permanent job for right man, provident scheme in operation.—Write, stating age, experience, salary required, Box 754, "The Builder."

CLERK OF WORKS. New Children's Village, Battle, Sussex. Appointment for first contract may lead to permanent post during 10 year construction period and subsequent post as Superintendent of Buildings.—Write Architects: Sir Hugh Casson, NEVILLE CONDER AND PARTNERS, 35 Thurloe-place, S.W.7.

CLERK OF WORKS

Applications are invited from men aged 28 to 40 with at least O.N.C. (Building) or equivalent and experience as Clerk of Works of supervising the erection, modification and repair of industrial buildings. Experience of drawing up schedules of work to be done an advantage.

This staff position is pensionable and the normal working week is 5 days, 40 hours. Commencing salary £800/900 according to qualifications and experience.

Please write stating age, etc. to SP.A Dept.,

MICHELIN TYRE CO. LTD.,
STOKE-ON-TRENT.

IMPERIAL CHEMICAL INDUSTRIES LIMITED
require a

SALES REPRESENTATIVE

in its subsidiary Company, British Visqueen Limited.

He would be based in London and would be required to expand and develop the sales of polythene film to the building and civil engineering industries. Professional qualifications in these fields would therefore be an advantage but are not essential.

Included in the advantages of working for a rapidly expanding subsidiary of a large Company are a Profit Sharing Scheme and a Pension Fund. A car will be provided.

Applications giving age, qualifications and brief details of experience should be made in writing to:

The Personnel Officer,
British Visqueen Limited,
Six Hills Way, Stevenage, Herts.

REPRESENTATIVES

REPRESENTATIVES already calling on Builders, Contractors, Councils. Required to sell "Bullseye," "Dunlop," "North British" Wellington Boots. Liberal commission.—Write to FOSTERS (PLANT HIRE) Ltd., Granborough, Bletchley.

ROBERTS ADLARD & CO., Ltd., Require for the London area a REPRESENTATIVE having an existing connection with Architects and Surveyors and a specialised knowledge in some or all of the following: Slating, tiling, asbestos and aluminium roofing, over and under purlin linings.—State age, qualifications and salary required, to Secretary, Tweedy-road, Bromley, Kent.

REPRESENTATIVES already calling on Builders, Estate Developers and Builders' Merchants. Required to sell a range of standard Kitchen Units in London and the Home Counties on commission basis only. —Write, Box 128, "The Builder."

EXPERIENCED REPRESENTATIVES,

already calling on woodworking trades and large timber users, required in various areas to sell established line, with large and rapidly expanding potential, of heavy duty fastening equipment, including consumable fasteners. Exclusive territory and generous commission terms offered. State age, experience, territory covered to

Box No. 947, "The Builder"

LANCASHIRE YORKSHIRE SOUTH WALES

Experienced and successful representatives with existing connections, are invited to introduce the range of "Prestige" fitted kitchen units to architects, builders and merchants.

Excellent opportunity to men with proven selling ability and with the "know how" approach.

Apply: Managing Director,
Prestige Kitchen Furniture,
Byron Road, Wealdstone,
Middx.

Tel: HARROW 2236.

BUILDERS' ASSISTANTS

BUILDER'S ASSISTANT Required with all-round knowledge of the industry, and anxious to take up either Estimating or Quantity Surveying. Excellent prospects in expanding organisation for keen young man.—Write, R. DURTNELL AND SONS, Ltd., Brasted, Nr. Westerham, Kent.

AGENTS

3 top rate
CONTRACTORS AGENTS
or
GENERAL FOREMEN

required for large Municipal Flat contracts in the London area. Salary no object for first class men.

Box No. 596 'The Builder'

SIR LINDSAY PARKINSON Require AGENTS and GENERAL FOREMEN for speculative housing and flat contracts.—Please reply, stating trade and experience, to Housing Director, 6 Lambeth-road, London, S.E.1.

BUILDING AGENT
and
GENERAL FOREMAN

Top grade men required for the above positions, none other will be considered, for a large important building contract to start shortly in the Sutton Coldfield area of Birmingham. Applications should state, age, past employers, and recent similar jobs, carried out, and addressed to

Wilson Lovatt & Sons Ltd.,
Clarence Street, Wolverhampton.

THE LONDON FERRO-CONCRETE CO. LTD.

AGENTS

Several vacancies now occur, due to rapid expansion, for experienced young Agents able to control the construction of precast and in-situ reinforced concrete structures up to £100,000.

Top salaries will be paid to good men, and there are excellent prospects for promotion to Contracts Supervisor.

Details of age and experience should be sent to:

The Contracts Manager,
Maxted Close,
Hemel Hempstead, Herts.

AGENT

A vacancy has arisen for a well qualified civil engineering agent to take charge of a section of work to the value of £1 million forming part of a large heavy civil engineering contract in London.

Applications are invited, preferably from qualified men who have had good experience of general heavy civil engineering construction.

Please send full details to Box No. A.A. 3621, A.K. Advtg., Ltd., 212a Shaftesbury Ave., London, W.C.2.

AGENTS AND

GENERAL FOREMEN REQUIRED

Applicants must be fully experienced in high class reinforced concrete structures; able to work to planned programmes and to be cost conscious.

Please apply, with full particulars of experience, past employment, age and salary required, to **Box No. 722, "The Builder"**

E. S. GATES LTD.
VACANCIES FOR

AGENTS AND GENERAL FOREMEN

Top grade Agents and General Foremen required for several Contracts varying from £50,000—£250,000 in Bucks, Berks and Herts. Only men with first class experience and references need apply to:—

E. S. GATES LTD.
Chalfont Station Road, Amersham, Bucks

AGENTS

required in London and Guildford areas. Must be fully experienced in multi-storey flats and housing contracts. Apply in writing stating age, experience, and salary required to:—

W. J. Simms Sons & Cooke Ltd.
Sherwood House,
Beddington Lane, Croydon, Surrey.

BUILDING AGENTS AND GENERAL FOREMEN

If you are qualified by training and you have had experience of recent years in controlling major building contracts from start to finish with a minimum supervision from Head Office, and wish to join the permanent Contract Staff of an old established Company who are expanding their organisation in the Midlands area, we can offer you a position with a good salary and there is a pension and bonus scheme. Only top grade men need apply. Applications in strict confidence to **Personnel Manager,**

WILSON LOVATT & SONS LTD.,
Clarence Street, Wolverhampton

SITE AGENT/GENERAL FOREMAN for multi-storeyed concrete frame office blocks in N. London area. Good opportunities offered to the right man with growing concern.—Write, giving details and stating experience, Box 728, "The Builder."

BUILDING AGENT / GENERAL FOREMAN. Applications are invited by a National firm of Building and Civil Engineering Contractors for a top grade BUILDING AGENT or GENERAL FOREMAN, to take charge of the first stage of a large building project for shops and offices in the Devon area. The duration of this first stage is fifteen months and a bonus will be payable for completion on time. Good salary payable for the best men and prospects of continuous employment in the area likely. Pension scheme.—Apply with details of past experience, salary, to Box 778, "The Builder."

FOREMEN AND SUPERVISORS

WILLIAM WILLETT (CONTRACTORS) LTD.

Senior GENERAL FOREMEN

required for contracts in Surrey area. Experienced in all types of construction including reinforced concrete.

Apply in writing giving age, experience, technical training and salary required to

Sloane Square, S.W.1.

W. J. WHITTALL & SON, LTD.

Birmingham & London.

have vacancies for

GENERAL FOREMEN

on contracts in the West and North-West London Area, who have sound constructional knowledge and are experienced in the speedy erection of industrial and other buildings.

The posts carry good salaries commensurate with abilities and a pension scheme is in operation. Interviews can be arranged either in London or Birmingham but initial written application enclosed in an envelope marked "General Foreman," should give details of age, training and career, to :—

W. J. WHITTALL & SON, LTD.
Builders & Civil Engineers,
Ernest Gardens, Thames Road, London, W.4.

National Building and Civil Engineering Contractors invite applications for the following positions.

CONTRACTS SUPERVISORS

preferably with a recognised qualification in building or structural engineering and with good experience in control of a number of major works involving extensive reinforced concrete construction.

GENERAL FOREMEN

with experience of major building or civil engineering works.

SECTION FOREMEN

preferably carpenter trained and with experience in charge of smaller works or sections of larger contracts.

The positions are permanent and pensionable and offer good opportunities for advancement within an expanding organisation. **Salaries will be commensurate with the responsibilities involved.**

Please send full details, in confidence, to Box No. N.B. 3625, A.K. Advtg., Ltd., 212a Shaftesbury Ave., London, W.C.2.

GENERAL FOREMEN/AGENTS Required for medium-sized building contracts in Lincoln and Manchester. Must be able to control labour and sub-contractors and carry out routine site clerical work. Excellent prospects of permanency for right men.—Box 774, "The Builder."

GENERAL FOREMAN Required for London and Home Counties for Contracts between £100,000 and £500,000. Must be experienced and possess drive and initiative. Excellent terms and prospects.—Box 684, "The Builder."

MANUFACTURERS of high-class Joinery Require SITE SUPERVISORS, all areas. Only those capable of producing excellent site work economically need apply for opening with scope for advancement. Pension scheme.—Send full details of experience, age and salary expected, to Box 685, "The Builder."

BUILDING CONTRACTORS, Colchester district, urgently Require ASSISTANT SUPERVISOR. Write stating qualifications.—Box 688, "The Builder."

GENERAL FOREMAN. Several experienced men Required by well-known developers for flat and house construction in London, Home Counties, South Wales and the Midlands. These are permanent, pensionable positions for the right men. —Write fully to Building Manager, Box 687, "The Builder."

GENERAL FOREMAN Required for small flat contract, Crayford, Kent.—Apply, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

GENERAL FOREMAN Required for large Municipal flat contract, North Woolwich.—Apply, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

GENERAL FOREMAN for school extension, E. London. (£70,000 contract).—State age, previous experience and salary required, to Box 602, "The Builder."

GENERAL FOREMAN Required for housing and road contract at Camberley. Must be fully experienced in setting out roads, sewers and houses. Conversant with the use of a Dumpy Level. Capable of controlling the organisation of labour and plant on large-scale housing schemes.—Write, stating age, previous experience and salary required, to Contracts Manager, J. B. ROSE & CO., Ltd., 450/452 Edgware-road, London, W.2.

GENERAL FOREMEN Required in new factory (value approximately £20,000) at Elstead, Surrey, commencing mid August, and office block (value approximately £40,000) in North London commencing late August. Salary and prospects good and bonus on satisfactory results.—Apply in writing stating experience to COURTNEY & FAIRBAIRN Ltd., 377 Albany-road, Camberwell, S.E.5.

GENERAL FOREMAN Required to assist Site Agent on private housing development in Wallingford, Berks, area. Applicants must be conversant with this type of work and be able to supervise sub-contract trades. Sound knowledge of setting-out essential.—Apply in writing giving details of age, experience and salary required to Box 615, "The Builder."

GENERAL FOREMAN Required for new Classroom block, etc., at Acton.—Box 610, "The Builder."

WORKING GENERAL FOREMAN (Bricklayer by trade) Required, Chingford area.—Write, stating age, experience, salary required, to FIELD-DAVIS, Ltd., Norfolk-road, Barking.

MEDIUM-SIZED, well-established, N.E. Surrey building contractor Requires the services of several first-class GENERAL FOREMEN. The satisfactory completion of the first contract with the Company could lead to a permanent pensionable profit-sharing position. Contracts executed range to £150,000 and cover domestic and industrial works.—Write, fullest details of last ten years' employment, in confidence, to Box 647, "The Builder."

WORKING FOREMAN Required for housing sites in South Bedfordshire area. First-class tradesman, able to handle sub-contract labour. Full particulars, and salary required to Box 726, "The Builder."

QUALIFIED CHARGE HAND BRICKLAYERS and CARPENTERS Required for housing contract shortly commencing at Bicester. Charge hands will be required to work and control small gangs and must be able to read and interpret drawings. Accuracy in workmanship is essential. Bonus will be paid on top of gang bonus to those who show ability and give results.—Applications stating age, experience, rate required and when free to F. J. MINNS & CO., Ltd., 9 Westway, Botley, Oxford.

FOREMAN Required to supervise varied jobs in London area, Carpenter and Joiner preferred. Car driver for company vehicle.—Write stating wages, experience, etc., Box 738, "The Builder."

GENERAL FOREMEN Required by Cheshire Contractors for contracts in Manchester and Cheshire. Salaries of £1,100 per annum with permanency and good prospects for first-class men.—Write stating experience and qualifications to Box 737, "The Builder."

GENERAL FOREMAN Required for flats contract in Brentford. State age, experience and salary required.—Write CIRCLE CONSTRUCTION CO., Ltd., 65/71 Wembley Hill-road, Wembley, Middlesex.

GENERAL FOREMAN Required for housing, Camberley area.—State experience and salary required, Box 723, "The Builder."

GENERAL FOREMAN
BUILDER

Experienced man required for large housing contract in the North East Kent area. Must be capable of handling Sub Contractors firmly and maintain a good standard of workmanship. Only experienced men of high calibre should apply and the salary would be rewarding to a successful applicant.

Reply Box 695 'The Builder.'

SHOP FOREMAN Required for management of Manchester Builder's Joinery department and Woodworking Machine shop. Must be thoroughly conversant with architects' drawings, detailing and experienced in setting-out and organising the carrying out of purpose-made, high-class joinery work. Permanent position for suitable applicant with bonus and pension. Give previous experience in detail, age and salary.—Box 724, "The Builder."

EXPERIENCED GENERAL FOREMAN Required for housing contracts in the Home Counties and South Midlands. Accuracy in setting-out, ability to use dumpy level and strict control of labour essential. Preference will be given to those experienced in pre-planned contracts. Applications giving details of experience, age, salary required and when free to Box 725, "The Builder."

CIVIL ENGINEERING INSPECTORS Required for work on the construction of Nuclear Power Stations. Applicants, who must be well qualified, should write stating age, qualifications and experience to the Administrative Assistant to the Group Resident Superintendent, Hinkley Point, nr. Bridgwater, Somerset.

SUPERVISOR. Small works department of reputable Kensington firm Require SUPERVISOR to run jobs value £5 to £200. Must have good all round knowledge and experience in all trades and clean driving licence. State age, experience and salary required.—Box 763, "The Builder."

INSPECTOR Required by Consulting Engineers on finishing work at Power Station in North Kent. —Write to L. G. MOUCHEL & PARTNERS, Southbank House, Albert Embankment, London, S.E.11.

CARPENTERS & JOINERS

SETTER-OUT Required by Joinery manufacturers in N.W. London. Must be fully experienced in good-class work including bank fittings, laboratory joinery, etc.—Apply with details of previous experience and salary required, to R. CATTLE Ltd., Everitt-road, Chase-road, London, N.W.10.

SETTERS OUT Required for new developments in Shopfitting and Architectural Metalwork. Permanent pensionable appointment. Or will train suitable young tradesmen.—Write full details, AJAX ALUMINIUM Ltd., Kangley Bridge-road, London, S.E.26.

CLERKS

COST AND ACCOUNTS CLERK for Shopfitting Company in Nottingham. A knowledge of building and allied trades is necessary together with the ability to develop a new system about to be installed. This is an excellent opportunity for a young man to develop his own interest, in work of an interesting nature. Congenial conditions, canteen facilities, pension scheme and purchase discount.—Apply The General Manager, THE NOTTINGHAM SHOPFITTING CO., St. James's-street, Nottingham.

WAGES CLERK Required by leading firm of Plastering Contractors in London. Experience of Working Rule Agreement an advantage. Contributory Pension scheme in operation.—Apply, stating age, salary required, and experience, to Box 689, "The Builder."

CASHIERS and COST CLERKS urgently Required for building contracts in the U.K. Good salary and prospects. Pension scheme.—Write, Dept. C.C.C., SIR LINDSAY PARKINSON & CO., Ltd., 6 Lambeth-road, S.E.1.

TYPIST AND GENERAL OFFICE DUTIES for Quantity Surveyors, W.C.1.—Experience, age and salary required to Box 914, "The Builder."

Required in South Wales,

BUILDING MANAGER

preferably Carpenter by trade, with the necessary intelligence, education, initiative and drive to start a Branch Office in the Abergavenny/Brecon Area, with a view to handling all Contracts in Wales and adjoining Counties.

Starting salary £1,000 per annum plus bonus.

Apply in writing, giving full particulars to:—

Contracts Director,
WOOLAWAY BUNGALOWS (TAUNTON) LIMITED,
26, Upper High Street, Taunton, Somerset.

IMPERIAL CHEMICAL INDUSTRIES LIMITED
require a

SALES REPRESENTATIVE

in its subsidiary Company, British Visqueen Limited.

He would be based in London and would be required to expand and develop the sales of polythene film to the building and civil engineering industries. Professional qualifications in these fields would therefore be an advantage but are not essential.

Included in the advantages of working for a rapidly expanding subsidiary of a large Company are a Profit Sharing Scheme and a Pension Fund. A car will be provided.

Applications giving age, qualifications and brief details of experience should be made in writing to:

The Personnel Officer,
British Visqueen Limited,
Six Hills Way, Stevenage, Herts.

REPRESENTATIVES

REPRESENTATIVES already calling on Builders, Contractors, Councils. Required to sell "Bullseye," "Dunlop," "North British" Wellington Boots. Liberal commission.—Write to FOSTERS (PLANT HIRE) Ltd., Granborough, Bletchley.

ROBERTS ADLARD & CO., Ltd., Require for the London area a REPRESENTATIVE having an existing connection with Architects and Surveyors and a specialised knowledge in some or all of the following: Slating, tiling, asbestos and aluminium roofing, over and under purlin linings.—State age, qualifications and salary required, to Secretary, Tweedy-road, Bromley, Kent.

REPRESENTATIVES already calling on Builders, Estate Developers and Builders' Merchants. Required to sell a range of standard Kitchen Units in London and the Home Counties on commission basis only. —Write, Box 128, "The Builder."

EXPERIENCED REPRESENTATIVES,

already calling on woodworking trades and large timber users, required in various areas to sell established line, with large and rapidly expanding potential, of heavy duty fastening equipment, including consumable fasteners. Exclusive territory and generous commission terms offered. State age, experience, territory covered to

Box No. 947, "The Builder"

LANCASHIRE YORKSHIRE SOUTH WALES

Experienced and successful representatives with existing connections, are invited to introduce the range of "Prestige" fitted kitchen units to architects, builders and merchants.

Excellent opportunity to men with proven selling ability and with the "know how" approach.

Apply: Managing Director,
Prestige Kitchen Furniture,
Byron Road, Wealdstone,
Middx.

Tel: HARROW 2236.

BUILDERS' ASSISTANTS

BUILDER'S ASSISTANT Required with all-round knowledge of the industry, and anxious to take up either Estimating or Quantity Surveying. Excellent prospects in expanding organisation for keen young man.—Write, R. DURTNELL AND SONS, Ltd., Brasted, Nr. Westerham, Kent.

AGENTS

3 top rate
CONTRACTORS AGENTS
or
GENERAL FOREMEN

required for large Municipal Flat contracts in the London area. Salary no object for first class men.

Box No. 596 'The Builder'

SIR LINDSAY PARKINSON Require AGENTS and GENERAL FOREMEN for speculative housing and flat contracts.—Please reply, stating trade and experience, to Housing Director, 6 Lambeth-road, London, S.E.1.

BUILDING AGENT
and
GENERAL FOREMAN

Top grade men required for the above positions, none other will be considered, for a large important building contract to start shortly in the Sutton Coldfield area of Birmingham. Applications should state, age, past employers, and recent similar jobs, carried out, and addressed to

Wilson Lovatt & Sons Ltd.,
Clarence Street, Wolverhampton.

THE LONDON FERRO-CONCRETE CO. LTD.

AGENTS

Several vacancies now occur, due to rapid expansion, for experienced young Agents able to control the construction of precast and in-situ reinforced concrete structures up to £100,000.

Top salaries will be paid to good men, and there are excellent prospects for promotion to Contracts Supervisor.

Details of age and experience should be sent to:

The Contracts Manager,
Maxted Close,
Hemel Hempstead, Herts.

AGENT

A vacancy has arisen for a well qualified civil engineering agent to take charge of a section of work to the value of £1 million forming part of a large heavy civil engineering contract in London.

Applications are invited, preferably from qualified men who have had good experience of general heavy civil engineering construction.

Please send full details to Box No. A.A. 3621, A.K. Advtg., Ltd., 212a Shaftesbury Ave., London, W.C.2.

AGENTS AND
GENERAL FOREMEN REQUIRED

Applicants must be fully experienced in high class reinforced concrete structures; able to work to planned programmes and to be cost conscious.

Please apply, with full particulars of experience, past employment, age and salary required, to **Box No. 722, "The Builder"**

E. S. GATES LTD.
VACANCIES FOR
AGENTS AND GENERAL FOREMEN

Top grade Agents and General Foremen required for several Contracts varying from £50,000—£250,000 in Bucks, Berks and Herts. Only men with first class experience and references need apply to:—

E. S. GATES LTD.
Chalfont Station Road, Amersham, Bucks

AGENTS

required in London and Guildford areas. Must be fully experienced in multi-storey flats and housing contracts. Apply in writing stating age, experience, and salary required to:—

W. J. Simms Sons & Cooke Ltd.
Sherwood House,
Beddington Lane, Croydon, Surrey.

BUILDING AGENTS AND GENERAL FOREMEN

If you are qualified by training and you have had experience of recent years in controlling major building contracts from start to finish with a minimum supervision from Head Office, and wish to join the permanent Contract Staff of an old established Company who are expanding their organisation in the Midlands area, we can offer you a position with a good salary and there is a pension and bonus scheme. Only top grade men need apply. Applications in strict confidence to **Personnel Manager,**

WILSON LOVATT & SONS LTD.,
Clarence Street, Wolverhampton

SITE AGENT/GENERAL FOREMAN for multi-storeyed concrete frame office blocks in N. London area. Good opportunities offered to the right man with growing concern.—Write, giving details and stating experience, Box 728, "The Builder."

BUILDING AGENT / GENERAL FOREMAN. Applications are invited by a National firm of Building and Civil Engineering Contractors for a top grade BUILDING AGENT or GENERAL FOREMAN, to take charge of the first stage of a large building project for shops and offices in the Devon area. The duration of this first stage is fifteen months and a bonus will be payable for completion on time. Good salary payable for the best men and prospects of continuous employment in the area likely. Pension scheme.—Apply with details of past experience, salary, to Box 778, "The Builder."

FOREMEN AND SUPERVISORS

WILLIAM WILLETT (CONTRACTORS) LTD.

Senior GENERAL FOREMEN

required for contracts in Surrey area. Experienced in all types of construction including reinforced concrete.

Apply in writing giving age, experience, technical training and salary required to

Sloane Square, S.W.1.

W. J. WHITTALL & SON, LTD.

Birmingham & London.

have vacancies for

GENERAL FOREMEN

on contracts in the West and North-West London Area, who have sound constructional knowledge and are experienced in the speedy erection of industrial and other buildings.

The posts carry good salaries commensurate with abilities and a pension scheme is in operation. Interviews can be arranged either in London or Birmingham but initial written application enclosed in an envelope marked "General Foreman," should give details of age, training and career, to :—

W. J. WHITTALL & SON, LTD.
Builders & Civil Engineers,
Ernest Gardens, Thames Road, London, W.4.

National Building and Civil Engineering Contractors invite applications for the following positions.

CONTRACTS SUPERVISORS

preferably with a recognised qualification in building or structural engineering and with good experience in control of a number of major works involving extensive reinforced concrete construction.

GENERAL FOREMEN

with experience of major building or civil engineering works.

SECTION FOREMEN

preferably carpenter trained and with experience in charge of smaller works or sections of larger contracts.

The positions are permanent and pensionable and offer good opportunities for advancement within an expanding organisation. **Salaries will be commensurate with the responsibilities involved.**

Please send full details, in confidence, to Box No. N.B. 3625, A.K. Advtg., Ltd., 212a Shaftesbury Ave., London, W.C.2.

GENERAL FOREMEN/AGENTS Required for medium-sized building contracts in Lincoln and Manchester. Must be able to control labour and sub-contractors and carry out routine site clerical work. Excellent prospects of permanency for right men.—Box 774, "The Builder."

GENERAL FOREMAN Required for London and Home Counties for Contracts between £100,000 and £500,000. Must be experienced and possess drive and initiative. Excellent terms and prospects.—Box 684, "The Builder."

MANUFACTURERS of high-class Joinery Require SITE SUPERVISORS, all areas. Only those capable of producing excellent site work economically need apply for opening with scope for advancement. Pension scheme.—Send full details of experience, age and salary expected, to Box 685, "The Builder."

BUILDING CONTRACTORS. Colchester district, urgently Require ASSISTANT SUPERVISOR. Write stating qualifications.—Box 688, "The Builder."

GENERAL FOREMAN. Several experienced men Required by well-known developers for flat and house construction in London, Home Counties, South Wales and the Midlands. These are permanent, pensionable positions for the right men. —Write fully to Building Manager, Box 687, "The Builder."

GENERAL FOREMAN Required for small flat contract, Crayford, Kent.—Apply, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

GENERAL FOREMAN Required for large Municipal flat contract, North Woolwich.—Apply, RICHARDSON, Herbert House, Slade Green, Erith, Kent.

GENERAL FOREMAN for school extension, E. London. (£70,000 contract).—State age, previous experience and salary required, to Box 602, "The Builder."

GENERAL FOREMAN Required for housing and road contract at Camberley. Must be fully experienced in setting out roads, sewers and houses. Conversant with the use of a Dumpy Level. Capable of controlling the organisation of labour and plant on large-scale housing schemes.—Write, stating age, previous experience and salary required, to Contracts Manager, J. B. ROSE & CO., Ltd., 450/452 Edgware-road, London, W.2.

GENERAL FOREMEN Required in new factory (value approximately £20,000) at Elstead, Surrey, commencing mid August, and office block (value approximately £40,000) in North London commencing late August. Salary and prospects good and bonus on satisfactory results.—Apply in writing stating experience to COURTNEY & FAIRBAIRN Ltd., 377 Albany-road, Camberwell, S.E.5.

GENERAL FOREMAN Required to assist Site Agent on private housing development in Wallingford, Berks, area. Applicants must be conversant with this type of work and be able to supervise sub-contract trades. Sound knowledge of setting-out essential.—Apply in writing giving details of age, experience and salary required to Box 615, "The Builder."

GENERAL FOREMAN Required for new Classroom block, etc., at Acton.—Box 610, "The Builder."

WORKING GENERAL FOREMAN (Bricklayer by trade) Required, Chingford area.—Write, stating age, experience, salary required, to FIELD-DAVIS, Ltd., Norfolk-road, Barking.

MEDIUM-SIZED, well-established, N.E. Surrey building contractor Requires the services of several first-class GENERAL FOREMEN. The satisfactory completion of the first contract with the Company could lead to a permanent pensionable profit-sharing position. Contracts executed range to £150,000 and cover domestic and industrial works.—Write, fullest details of last ten years' employment, in confidence, to Box 647, "The Builder."

WORKING FOREMAN Required for housing sites in South Bedfordshire area. First-class tradesman, able to handle sub-contract labour. Full particulars, and salary required to Box 726, "The Builder."

QUALIFIED CHARGE HAND BRICKLAYERS and CARPENTERS Required for housing contract shortly commencing at Bicester. Charge hands will be required to work and control small gangs and must be able to read and interpret drawings. Accuracy in workmanship is essential. Bonus will be paid on top of gang bonus to those who show ability and give results.—Applications stating age, experience, rate required and when free to F. J. MINNS & CO., Ltd., 9 Westway, Botley, Oxford.

FOREMAN Required to supervise varied jobs in London area. Carpenter and Joiner preferred. Car driver for company vehicle.—Write stating wages, experience, etc., Box 738, "The Builder."

GENERAL FOREMEN Required by Cheshire Contractors for contracts in Manchester and Cheshire. Salaries of £1,100 per annum with permanency and good prospects for first-class men.—Write stating experience and qualifications to Box 737, "The Builder."

GENERAL FOREMAN Required for flats contract in Brentford. State age, experience and salary required.—Write CIRCLE CONSTRUCTION CO., Ltd., 65/71 Wembley Hill-road, Wembley, Middlesex.

GENERAL FOREMAN Required for housing, Camberley area.—State experience and salary required, Box 723, "The Builder."

GENERAL FOREMAN

BUILDER

Experienced man required for large housing contract in the North East Kent area. Must be capable of handling Sub Contractors firmly and maintain a good standard of workmanship. Only experienced men of high calibre should apply and the salary would be rewarding to a successful applicant.

Reply Box 695 'The Builder.'

SHOP FOREMAN Required for management of Manchester Builder's Joinery department and Woodworking Machine shop. Must be thoroughly conversant with architects' drawings, detailing and experienced in setting-out and organising the carrying out of purpose-made, high-class joinery work. Permanent position for suitable applicant with bonus and pension. Give previous experience in detail, age and salary.—Box 724, "The Builder."

EXPERIENCED GENERAL FOREMAN Required for housing contracts in the Home Counties and South Midlands. Accuracy in setting-out, ability to use dumpy level and strict control of labour essential. Preference will be given to those experienced in pre-planned contracts. Applications giving details of experience, age, salary required and when free to Box 725, "The Builder."

CIVIL ENGINEERING INSPECTORS Required for work on the construction of Nuclear Power Stations. Applicants, who must be well qualified, should write stating age, qualifications and experience to the Administrative Assistant to the Group Resident Superintendent, Hinkley Point, nr. Bridgwater, Somerset.

SUPERVISOR. Small works department of reputable Kensington firm Require SUPERVISOR to run jobs value £5 to £200. Must have good all round knowledge and experience in all trades and clean driving licence. State age, experience and salary required.—Box 763, "The Builder."

INSPECTOR Required by Consulting Engineers on finishing work at Power Station in North Kent. —Write to L. G. MOUCHEL & PARTNERS, Southbank House, Albert Embankment, London, S.E.11.

CARPENTERS & JOINERS

SETTER-OUT Required by Joinery manufacturers in N.W. London. Must be fully experienced in good-class work including bank fittings, laboratory joinery, etc.—Apply with details of previous experience and salary required, to R. CATTLE Ltd., Everitt-road, Chase-road, London, N.W.10.

SETTERS OUT Required for new developments in Shopfitting and Architectural Metalwork. Permanent pensionable appointment. Or will train suitable young tradesmen.—Write full details, AJAX ALUMINIUM Ltd., Kangley Bridge-road, London, S.E.26.

CLERKS

COST AND ACCOUNTS CLERK for Shopfitting Company in Nottingham. A knowledge of building and allied trades is necesary together with the ability to develop a new system about to be installed. This is an excellent opportunity for a young man to develop his own interest, in work of an interesting nature. Congenial conditions, canteen facilities, pension scheme and purchase discount.—Apply The General Manager, THE NOTTINGHAM SHOPFITTING CO., St. James's-street, Nottingham.

WAGES CLERK Required by leading firm of Plastering Contractors in London. Experience of Working Rule Agreement an advantage. Contributory Pension scheme in operation.—Apply, stating age, salary required, and experience, to Box 689, "The Builder."

CASHIERS and COST CLERKS urgently Required for building contracts in the U.K. Good salary and prospects. Pension scheme.—Write, Dept. C.C.C., SIR LINDSAY PARKINSON & CO., Ltd., 6 Lambeth-road, S.E.1.

TYPIST AND GENERAL OFFICE DUTIES for Quantity Surveyors, W.C.1.—Experience, age and salary required to Box 914, "The Builder."

Required in South Wales,

BUILDING MANAGER

preferably Carpenter by trade, with the necessary intelligence, education, initiative and drive to start a Branch Office in the Abergavenny/Brecon Area, with a view to handling all Contracts in Wales and adjoining Counties.

Starting salary £1,000 per annum plus bonus.

Apply in writing, giving full particulars to:—

Contracts Director,
WOOLAWAY BUNGALOWS (TAUNTON) LIMITED,
26, Upper High Street, Taunton, Somerset.

SECRETARY SHORTHAND TYPIST

required by firm of National Building & Civil Engineering Contractors, to work for two top Executives. New Modern Offices in Westminster area. Good salary and prospects, Staff Pension Fund in existence

also

LABOUR & WELFARE OFFICER REQUIRED

by National Group Contractors with Head Office in Westminster.

Applicants should write, stating age, full particulars of past experience and salary required to:

Box 702, "The Builder"

BOOKKEEPER

Male. Aged 20—30.

Required at Head Office of Building Contracting Company in Mitcham. This is a responsible and interesting position. Well-paid and offering excellent prospects for a suitably experienced person. Apply in writing, giving full details of age, education and experience to:—

The Secretary,
M. Howard (Mitcham) Ltd.,
Wandle House,
London Road, Mitcham, Surrey.

WAGES CLERKS
TIMEKEEPERS
CASHIERS

B. & C. E. Contractor has several vacancies in the above positions for young men with some years' experience on large building contracts with National Contracting firms for work on Contracts in the Midlands area. The positions are permanent with a good salary. Apply to

Wilson Lovatt & Sons Ltd., Clarence Street, Wolverhampton.

CUBITTS

THE CUBITT GROUP

Applications are invited from

Accountants

(preferably qualified)

for work on sites at home and overseas.

The positions are permanent with participation in annual bonus and contributory pension scheme.

Write, in confidence, to

Chief Accountant,
1, Queen Anne's Gate, London, S.W.1.

BUILDERS' CLERK Required in Quantity Surveyor's office, Westminster, S.W.1. Five-day week.—Reply, stating age, experience and salary required, to Box 584, "The Builder."

COST & BONUS CLERK Required in flooring contractors' office, S.E. London.—Apply, stating age, experience and salary required, to Box 597, "The Builder."

ACCOUNTS CLERK Required in flooring contractors' office, S.E. London. Experienced in general accounts, wages, P.A.Y.E., wages-analysis, etc.—Apply, stating age, experience and salary required, to Box 598, "The Builder."

WAGES CLERK, conversant with building and civil engineering industries, Required for head office of large organisation in London, N.W.6. Salary according to age and experience. Excellent pension and life assurance schemes.—Write, full details of age, experience and salary required, to Box 514, "The Builder."

COST AND ACCOUNTS CLERK with experience in Costing department of contractors' offices, but able to operate new system being installed now. Staff pension scheme, pleasant office accommodation. This year's holiday arrangements considered. —Give details of career and salary required to Secretary, COMBEN & WAKELING Ltd., Kingsbury House, Kingsbury Circle, London, N.W.9.

SITE OFFICE CLERK Required by firm engaged on private housing development in Banbury. Must be good at figures and have had previous similar experience in this work. Duties will consist generally in office administration including certification of accounts, invoicing, etc. Good opportunities for young man with initiative.—Write stating age, experience and salary required to Box 616, "The Builder."

BUILDERS' CLERK Required with some knowledge of buying, for medium-size London company.—Write stating age, salary, experience, Box 643, "The Builder."

COST CLERK (experienced) Required for medium-sized Builders' office, East London.—Full details please to Box 650, "The Builder."

COST CLERK Required for Joinery Works, should have previous experience in woodworking or building trades, details of which should accompany application, to R. CATTLE, Ltd., Everitt-road, Chase-road, London, N.W.10.

COST CLERK Required by Building Contractors. This is an excellent opportunity for a keen and efficient man, seeking to expand his future, to join a young and rapidly growing company. I.C.W.A. standard preferred.—Apply to STIRTON PARTNERS Ltd., 871 High-road, N.12. HILside 8866.

YOUNG man with good grounding in all aspects of Builders' office work Required for administrative position in young expanding company with every opportunity for advancement.—Full particulars and salary required upon commencement to Box 727, "The Builder."

SENIOR WAGES CLERK to take charge small but busy wages department of S.W.1 company. Previous experience of building trade essential—knowledge of Kalamazoo system preferable. Commencing salary according to age and experience plus L.Vs. Pension scheme. No Saturdays.—Please write stating age, experience and salary required to Box 735, "The Builder."

COST CLERK for Surveying Department, FORD & WALTON Ltd. Employment will be at Stratford, E.15, until January, 1961, when the Company is moving to new headquarters being built at Wembley Park, Middlesex. Application, in own handwriting, stating age, experience and salary required to Personnel Manager, FORD & WALTON Ltd., Walton House, Warton-road, E.15.

COST CLERK Required W.C.2 district. Man capable of carrying cost through to invoice preferred, but not essential if good at costing. Wages in accordance with ability. Permanent job with prospects in an expanding company.—Write, Box 756, "The Builder."

MALE COST CLERK. Experience of Civil Engineering work and Working Rule Agreement essential. Required by SIR JOHN JACKSON, Ltd. for a permanent post at their Head Office. This is an interesting job in a rapidly expanding department.—Reply, in own writing, to the Secretary, 53 Victoria-street, London, S.W.1.

BUILDERS' ACCOUNTS CLERK Required by Chartered Quantity Surveyors in Swansea for work in connection with long-term Civil Engineering Contracts. Alternate Saturdays free.—Please write, stating age, experience and salary required, to Box 753, "The Builder."

INVOICE CHECKER Required by FORD & WALTON Ltd. Employment will be at Stratford, E.15, until January,1961, when the Company is moving to new headquarters being built at Wembley Park, Middlesex.—Application, in own handwriting, stating age, experience and salary required to Personnel Manager, FORD & WALTON Ltd., Walton House, Warton-road, E.15.

FITZPATRICK & SON (CONTRACTORS) LTD.

have the following staff vacancies:—

(a) **SITE CLERK** for London area, experienced wages, checking and costs.

(b) **H. O. SENIOR INVOICE CHECKER** for bought ledger department, able correspond with suppliers.

(c) **SITE COST CLERK** for London area.

(d) **H.O. COST CLERK,** Contract and Departmental Costs.

Post permanent and pensionable

Apply Secretary,
455 Old Ford Road, London, E.3.

LESLIE & CO. LTD.

National Builders
require

COST CLERK

in their head office for interesting work on labour cost and production returns

Write, giving full particulars, to:

Leslie & Co. Ltd.,
20 Peel Street, London W.8.

OVERSEAS APPOINTMENTS

Prepaid rate, 24 words, 8/6; additional 6 words, 2/-. Box number, including Forwarding Replies, 2/-.

ARABIAN GULF. QUANTITY SURVEYOR Required by professional firm. Eighteen month tour with preliminary period in London office. Substantial salary with accommodation and car allowance provided. No local income tax. Bachelor preferred age over 25.—Apply, stating qualifications and experience, to Box 987, "The Builder."

TAKERS-OFF, Australia, Sydney and Melbourne. Experienced TAKERS-OFF Required for three-year contracts, £A1,900, £A2,000, £A2,100, plus considerable overtime at increased rate, bonus on completion of contract. Fares to Australia paid. Perfect working conditions in air-conditioned office. Extra holidays. Continuation contract may be obtained.—Box 550, "The Builder."

SYDNEY, AUSTRALIA. A vacancy occurs for experienced TAKER-OFF. Commencing salary £A1,900, excluding overtime. Fare paid.—Box 551, "The Builder."

QUANTITY SURVEYORS Require qualified men for offices in Sydney and Perth, Australia.—Write stating age, experience and salary required, Box 919, "The Builder."

SITE QUANTITY SURVEYOR, well experienced, Required by professional firm in the Bahamas. Duties: Surveying works in progress, preparing Interim Certificates, Pricing and agreeing Final Accounts.—Apply stating age and experience to Box 642, "The Builder."

EAST AFRICAN Chartered Quantity Surveyors Require qualified TAKER-OFF (bachelor), age about 25-27. Basic salary £1,350 per annum for eighteen months' tour, six weeks' leave at end of satisfactory tour, air fares by British United Airways. Also, two TAKERS-OFF (bachelors), age about 23-27, basic salary £1,200 per annum for eighteen months' tour and remainder as above. In first case housing available at £7 10s. per month, and possible in the second.—Apply, Box 608, "The Builder."

QUANTITY SURVEYORS, preferably qualified, Required by London professional firm for one year's service in Kuwait. Good conditions with tax free salaries and allowances for suitable men aged between 25 and 45 and with pensionable positions available in U.K. upon return or further employment abroad.—Apply Box 712, "The Builder."

WORKER-UP Required by RICHARD COSTAIN Ltd. to assist in the preparation of schedules and bills of quantities for work in the Middle East. At least 3 years' experience required which must include some taking-off. Good prospects for a man wishing to make a career in estimating. Age preferably 21-24. Starting salary in the range £700-£800 per annum depending upon experience.—Please write to Personnel Officer, 111 Westminster Bridge-road, London, S.E.1.

QUANTITY SURVEYOR Required for Contractor's office in Jamaica for responsible post dealing with a major project. The post is initially for two years and offers an excellent opportunity for gaining experience with an established firm. Good salary and fares paid and car provided.—Box 992, "The Builder."

QUANTITY SURVEYORS Required immediately Chartered office, Teheran, Persia. Salaries £2,000 to £3,500 annually depending on age, qualifications, experience, plus leave. Free passages and usual conditions.—Box 803, "The Builder."

SERVICES OFFERED

Minimum 8s. 6d. (24 words)
Each additional 6 words 2s. Box number, Including Forwarding Replies, 2s.

THE SITE SURVEY COMPANY
BLACKHEATH, S.E.3. Tel.: LEE Green 7444-5
Fully equipped to undertake urgent surveys in any part of the country and abroad. Specialists in ½" scale detailed surveys for extensive city development areas.

CONTRACTOR'S ESTIMATES. Building and Civil Engineering; competitive pricing at current rates. Alterations our speciality.—AMALGAMATED BUILDING SERVICES, 70 Bridge-road, Chessington. 'Phone: Epsom 4255.

BUILDERS' ESTIMATES accurately prepared from Bills of Quantities, plans and specifications. Prompt, efficient service.—VICTOR H. FERN, 21 Tettenhall-road, Wolverhampton. Telephone: Wolverhampton 24406-7.

QUALIFIED QUANTITY SURVEYORS with own Central London office offer assistance to the profession.—Tel.: CHAncery 4246-7.

QUANTITY SURVEYOR prepares estimates for the profession from Bills of Quantities or plans and specifications. Moderate charges.—SPRinggrove 2991.

SPECIALIST PRINTERS to Building Trade. Duplicate books letterheads, estimates, time sheets, etc. Prompt service, estimates free.—MURRAYS PRESS, 44 York Way, N.20. ENTerprise 2735.

Architectural & Technical Consultants
Use us as your own Architectural or Technical Section.
Designs, Working Drawings, Details, Surveys, etc.
Experienced in all types of Buildings including estate layouts and obtaining local authority approvals.
We will co-operate with your own specialist departments if necessary.
Full co-operation and complete confidence.
JUST PHONE WALLINGTON 9883 AND PRINCIPAL WILL CALL ANYWHERE TO TAKE INSTRUCTIONS.

RECENTLY in this Journal we have claimed to be SPECIALISTS IN ESTIMATING. We base our claim on the fact of 35 years' hard, practical experience, on the site and in the Costs Department. We work for the "big fellows" of the industry, but we also cater for the medium-sized Builder who does not find it economical to keep a staff for estimating. For him there is our "Estimating Service at FIXED FEES." Why not write to-day for details to BUILDERS (PROFESSIONAL) SERVICES, 21 Baker-street, London, W.1. Tel.: HUNter 4213.

SERVICES OFFERED. Free-lance MEASURING SURVEYOR. Experienced in Contracts up to £300,000 for Interim Valuations and Final Accounts.—Box 520, "The Builder."

DRAFTING AND TRACING undertaken. Architectural and engineering. Prompt service.—Box 765, "The Builder."

WANTED: Abstracting, Billing and similar assistance to the profession. Southern only. Rate 8/6d. per hour.—Box 761, "The Builder."

FREE LANCE SURVEYOR seeks Commissions from trade, profession. Measuring for Sub-Contractors, all trades. Final A/c, Taking-off. Southern Home Counties. Car owner.—229 Spring Grove-road, Isleworth, Middx.

ARCHITECTS · SURVEYORS CONTRACTORS
WE SPECIALISE IN SURVEYS OF LAND SITES, BUILDINGS AND FACTORY PREMISES FOR CONVERSION & DEVELOPMENT.
A DRAWING OFFICE ALWAYS AT YOUR DISPOSAL FOR THE PREPARATION OF PLANS, SKETCHES, TRACINGS, PRINTS & PHOTOGRAPHIC COPYING OF BILLS OF QUANTITIES, SCHEDULES AND SPECIFICATIONS.
ALLERTON STUDIOS
DESIGNERS, DRAUGHTSMEN, PHOTOGRAPHERS
14 MALEY AVE. LONDON. S.E.27.
Tel. GIPsy Hill 3782.

GENTLEMAN, with top level business and social contacts amongst leading Architects Developers, invites enquiries from companies or firms who desire to increase their turnover by introduction of new business on retainer and commission basis.—Box 932, "The Builder."

CHARTERED QUANTITY SURVEYOR (A.R.I.C.S.) with own office can offer Assistance to the profession.—Box 637, "The Builder."

SPECIALIST SERVICES offered to the Building industry comprising preparation of Estimates, Buying and Piecework Schedules.—Details on request from WOOLGAR, KENT & ASSOCIATES, Estimating Surveyors, 51 High-street, Bridgwater, Somerset. Telephone: Bridgwater 3635.

BUILDER'S ESTIMATES accurately prepared to your requirements from Drawings or Quantities.—For satisfactory results with reduced overheads, consult THE BUILDERS' ESTIMATOR, 73 New Bedford-road, Luton, Beds. 'Phone: Luton 8077.

INCORPORATED QUANTITY SURVEYOR, with own West of England office, offers assistance, in confidence, to the profession.—Box 744, "The Builder."

BES

Established in 1921, B.E.S. provides an efficiently organized national service to contractors in preparing and/or pricing quantities, site measuring, etc., and handles approximately £20,000,000 of estimating annually. A permanent staff of experienced surveyors always available. Phone or write for brochure, or send Plans or Quantities to
The Builders' Estimating Service Ltd.
2, WESTMINSTER BANK CHAMBERS, SHEPHERDS BUSH, W.12. Phone SHE 7975
There are also B.E.S. offices in Manchester, Birmingham and Worcester.

PUBLIC NOTICES

HAMMERSMITH TOWN HALL.—Assembly Hall Suite and/or Small Hall available for Dances, Dinners, Dinner/Dances, Concerts, Conferences, Meetings, etc. Catering by the Council's Catering Service.—Inquiries: RIVerside 3020 (Ext. 41).

AGENCIES

AGENTS Required, calling on Architects and Surveyors. New Polyester/glassfibre products for the building industry.—MITRA (PLASTICS) Ltd., Merthyr Tydfil, Glam. Merthyr 2806.

CITY CALCULATIONS LTD.

SPECIALISTS IN COMPUTATIONS

for

QUANTITY SURVEYORS and CONTRACTORS

Dimensions Squared • Abstracts Cast and Reduced
Bills Extended and Cast • Increase Costs Claims Checked

22, LITTLE RUSSELL ST., W.C.1 CHAncery 3171

CONFIDENTIAL SERVICE QUICKLY EXECUTED

SITUATIONS WANTED, ETC.

Minimum charge 3s. (24 words)
Each additional 6 words, 1s. Box number, Including Forwarding Replies, 1s. 3d.

PROVIDENT INSTITUTION OF BUILDERS FOREMEN and CLERKS OF WORKS
(established 1842)
CARPENTERS HALL, 28, AUSTIN FRIARS, LONDON, E.C.2.
(By kind permission of the Worshipful Company of Carpenters.)
CONTRACT MANAGERS, CLERKS OF WORKS, AGENTS and STAFF FOREMEN are invited to apply for membership of this Institution, which has for over a century granted pensions to members and their widows and so assist to maintain the status and promote the interests of supervisory staff in the Industry. Architects, Builders and Civil Engineers requiring efficient staff as above are requested to contact the
General Secretary,
J. W. TILLER, L.I.O.B.,
11½, Marlborough Hill, St. John's Wood, London, N.W.8.
Phone: PRImrose 7336.

STAFF ARCHITECT (45) on high salary, seeks new appointment as part-time or full-time Staff Architect or Manager or Resident Architect.—Box 651, "The Builder."

ARCHITECTURAL ASSISTANT, 10 years' D.O. experience, working drawings, details, surveying, building supervision, skilled craftsman, wishes to concentrate on drawing, perspectives, illustrating, model making, etc. Seeks post offering scope to develop and practice first-rate pictorial drawing.—Box 698, "The Builder."

L.I.O.B. (30) seeks responsible position. Experienced Architectural draughtsman, designer, artist. Sound knowledge site management, engineering, buying. Keen photographer, car owner. East London preferred.—Box 686, "The Builder."

DRAUGHTSMAN, sound knowledge of building construction and joinery, seeks situation in London area.—Box 755, "The Builder."

QUANTITY SURVEYOR, experienced professional duties and Building and Civil Engineering, seeks senior position in Manchester area.—Box 747, "The Builder."

QUANTITY SURVEYOR (43) with 25 years' experience, seeks SENIOR APPOINTMENT in the South with progressive Architect providing comprehensive service.—Box 758, "The Builder."

QUANTITY SURVEYOR (31), A.R.I.C.S., qualified 1951, seeks permanent senior position with London Q.S. Wide experience varied Contracts, Taking-off, Site Measurement, Interim Valuations, Final Accounts, etc.—Box 783, "The Builder."

QUANTITY SURVEYOR, aged 31, seeks Senior post with Contractor operating in and around London. Professionally trained and qualified (A.R.I.C.S.), fully experienced all types Contracts. Desires change to more active side of industry.—Box 797, "The Builder."

QUANTITY SURVEYOR (30) desires position in Portsmouth, Southampton, Bournemouth area. Considerable professional experience London and overseas. Bills of Quantities, Final Accounts. Salary region £1,100.—Box 775, "The Builder."

A.R.I.C.S., aged 32, having got as far as possible with present firm, seeks senior position with view eventual partnership with London or Surrey firm. Excellent experience of taking off, final accounts, etc., training and supervising staff.—Box 599, "The Builder."

AVAILABLE NOW. Senior BONUS and COST SURVEYOR, 36 years old. Home Counties base. Experience in Building and Civil Engineering, accustomed to setting all targets, supervising large staff on bonus, Unit Costing, Contract Costing, Cost Investigation, and Work Study. Experience on contracts from £50,000 to £1 million. Salary required £1,250.—Box 601, "The Builder."

BUILDING SURVEYOR (32) L.I.O.B., H.N.C. City and Guilds Final Quants., 12 years' experience, seeks position with London building and civil engineering company.—Box 600, "The Builder."

SENIOR SURVEYOR, age 39, seeks position with contractor or specialist in senior position; 25 years' experience with national building and civil engineering contractors. Desires change due to lack of future prospects.—Box 532, "The Builder."

SURVEYOR/ESTIMATOR, age 30, L.I.O.B., Requires responsible post with scope for initiative and energy. West and South-West London.—Box 620, "The Builder."

SURVEYOR. Senior man, fully experienced medium/large contracts and able to control staff. Requires situation, preferably with expanding organisation in London area.—Box 611, "The Builder."

SURVEYOR (34), wide experience medium-sized contracts with contractors and profession, sound estimator, desires permanent responsible position. North London, Herts, Essex. Own car.—Box 656, "The Builder."

SENIOR SURVEYOR with wide experience over 30 years, seeks responsible position. Site Measures, Valuations, Variations, Final Accounts including Sub-contractors, with or without supervision.—Box 676, "The Builder."

YOUNG married man (21) resident of South London, earnestly seeks position as trainee Chartered Surveyor (Building). G.C.E. level education. Reasonable remuneration.—Box 653, "The Builder."

SENIOR SURVEYOR/ESTIMATOR (39) Requires position S.E. London/N.W. Kent. Twenty-five years' site and office experience. Valuations, final accounts, sub-contractors, etc.—Box 714, "The Builder."

SURVEYOR, H.N.C. (26), eight years' experienced in dealing with contracts up to Final Accounts, desires change due to lack of future prospects. Conscientious, used to responsibility, requires permanent position near London.—Box 693, "The Builder."

FULLY TRAINED MEASURING SURVEYOR/TAKER-OFF, thirty-four years old, with twelve years' professional experience in England and Africa, wishes to change present job in London for one in the provinces or overseas. References available.—Box 705, "The Builder."

CHARTERED BUILDING SURVEYOR completes N.S. 31st August. C.E.M. trained. Experience: Small contracts complete, dilapidations, structural surveys, repairs/maintenance. Own car. Central/South London. Position encompassing most fields required.—Details, salary, Box 721, "The Builder."

SURVEYOR Requires active and responsible appointment in busy office, Chartered Architect's or Surveyors, London. Surveys, Working drawings, Details, Specifications, Schedules, Accounts, Clerk of Works' duties, etc. Practical building experience prior to 1940. Working knowledge Acts, Bylaws and standard method measurement. Refs.—Box 745, "The Builder."

YOUNG SURVEYOR, 22 (R.I.C.S. Intermediate), five years' practical experience, seeks employment with Chartered Quantity Surveyors in Westminster or Surrey area.—Reply Box 749, "The Builder."

SURVEYOR, junior, age 21½, H.N.C., Requires situation offering scope in return for initiative, with a view to eventually entering contract supervision.—Box 764, "The Builder."

SURVEYOR, age 26, with H.N.C. in Building, taking L.I.O.B. in September, and residing Herts./Bucks. border, seeks permanent situation as BUILDING SURVEYOR.—Box 796, "The Builder."

SENIOR SURVEYOR AND TAKER-OFF, well experienced in all branches of the profession, desirous of a more progressive position.—Box 760, "The Builder."

BUILDING SURVEYOR (40) experienced site and office, seeks post as ASSISTANT CONTRACTS MANAGER or SUPERVISOR with expanding Builders', West Middlesex/Bucks. area.—Box 804, "The Builder."

YOUNG MAN, 24, H.N.C., 5 years London Contractor, seeks position as ASSISTANT SURVEYOR, South coast area. Any responsible position considered.—Box 743, "The Builder."

TAKER-OFF with good all-round experience, 25, R.I.C.S., referred finalist, seeks responsible position in professional office, Guildford, Woking, N.E. Hants. Mid. Sept.—Box 666, "The Builder."

JUNIOR TAKER-OFF, 7 years' experience in the profession, seeks position with Chartered Quantity Surveyor in Central or East London. Salary required: £900 p.a.—Box 750, "The Builder."

LONDON Contractor's Senior BUILDING ESTIMATOR, 33, seeks similar/managerial position London public company. Wide experience medium/large contracts, including surveying and management. Fee work considered.—Box 541, "The Builder."

ESTIMATOR/SURVEYOR (23) seeks position offering chances for future advancement. Experience in alteration and contract works up to £100,000 in value. Present salary £900.—Box 658, "The Builder."

BUILDING ESTIMATOR AND SURVEYOR Requires post in London or Essex area. Forty-seven years of age with vast experience in estimating of all types, contract management and final accounts. Used to negotiating with clients.—Box 694, "The Builder."

ESTIMATOR, 33, seeks position with medium-size firm as ESTIMATOR or ESTIMATOR/SUPERVISOR, 16 years' building experience. Salary £1,400 plus car.—Box 780, "The Builder."

BUILDER'S OFFICE MANAGER AND COSTS ACCOUNTANT (49) seeks post. Twenty-five years' experience Costing Accounts, Bookkeeping, Wages, etc. Can manage jobbing. N. London or City.—Box 471, "The Builder."

PREFABRICATED Timber Buildings General Manager seeks appointment. Wide knowledge of management and factory administration and first-class knowledge of contemporary timber buildings. Advertiser offers competence in administrative and commercial field with hard work and loyalty.—Box 605, "The Builder."

CONTRACTS MANAGER (33) with 16 years' site and office experience, good organizer and conversant with all types of administration, seeks change with progressive firm of contractors. Car driver. Salary required, £1,300.—Box 655, "The Builder."

BUILDERS' ASSISTANT/MANAGER, 17 years executive positions, previously joiners' shop Foreman, seeks post London or Southern Counties. Full contract and jobbing experience, Estimating, Accounts.—Box 645, "The Builder."

BUILDING EXECUTIVE, aged 42 years, seeks situation Midland area (preferably Leicester area). Surveyor/Estimator trained. 13 years Contracts, managerial experience, large and small contracts.—Box 748, "The Builder."

BUILDER'S MANAGER, A.F.B., O.N.C., H.N.C., with complete control, ex Chief Estimator/Surveyor, with proven record of success in tendering, executing contracts, private schemes, seeks similar position with small/medium-sized Contractor where hard work and ability to increase turnover and profits will be rewarded with Partnership or Directorship.—Box 766, "The Builder."

CONTRACTS MANAGER/MANAGER (37) experienced in all aspects of Building and Civil Engineering from small works to £1,500,000 contracts, professionally trained, knowledge of work study and pre-planning, possesses excellent testimonials, seeks appointment with developing or expanding Company London or the South. Salary secondary if genuine future prospects.—Box 768, "The Builder."

CLERK OF WORKS, Building, or INSPECTOR OF WORKS, Civil Engineering, desires post anywhere abroad. Age 42, unmarried, experienced concrete construction, hydro schemes, architectural finishes, pipeline reticulation, etc. Ten years' experience overseas including tour at Kariba.—Write, MOORE, 11 Porchester-square, London, W.2.

CLERK OF WORKS with experience as Architect's Assistant in London Chartered office, Requires situation. General surveying duties including Surveys, Working drawings, Reports, etc. Refs.—Box 746, "The Builder."

CLERK OF WORKS, British, late forties, working abroad, experience on large contracts, Deep Foundations, Reinforced concrete, Civil engineering, building work, masonry, Surveying and Levelling, seeks change either in U.K. or abroad for similar post or Superintendent of Works. First-class technical qualifications and references.—Apply P.O. Box 1664, Kumasi, Ghana.

ADVERTISER seeks first appointment, CLERK OF WORKS or ASSISTANT. Age 43. A.I.C.W. (examination). Thorough knowledge building construction. East Sussex or Tunbridge area.—Box 767, "The Builder."

CLERK OF WORKS experienced in housing, schools, industrial buildings and maintenance, specifications, quantities and levelling. Good references.—Box 782, "The Builder."

BUYER (A.M.P.O.A.), 46, seeks situation. N.W. London preferred, over 25 years' civil engineering, including site experience, specialised knowledge contractors plant. Minimum salary £900.—Write, Box 628, "The Builder."

REPRESENTATIVE/SUPERVISOR, 5 years' experience Wall and Floor Tiling, seeks position S.E. England. Estimating, labour control. Surveyor trained.—Box 715, "The Builder."

AGENT/REPRESENTATIVE. Midlands. Established free-lance, now in position to expand. Available to act for manufacturer with project of calibre, involving design/cost negotiation.—Box 389, "The Builder."

SENIOR SITE AGENT/GENERAL FOREMAN. C. & J. Surveying background. Age 57, life experience supervising all types building works. Estate Developer from setting out to final completion. Roads, sewers, housing, used dealing with Architects, Surveyors and Clients. Control and measuring all trades sub-contractors. Cost-conscious. Good Refs. Mobile. At present engaged Notts area. Seeks change. Free in one month.—Offers, Box 609, "The Builder."

GENERAL FOREMAN seeks engagement; 30 years' experience as General in all classes and types of contracts—new, repairs and conversions. London area. Trade C. & J.—S. WRIGHT, 3 Gordon-road, London, N.3.

CONTRACTS SUPERVISOR/MANAGER (43) desires change to progressive organisation. All types contracts. Modern outlook, pre-planning, etc. Keen, energetic, use own initiative. London, Home Counties.—Box 654, "The Builder."

CONTRACTS SUPERVISOR, experienced contracts value £1½m. London area. Conversant modern methods, planning, site organisation, co-ordination of trades, etc. Age 52.—Apply Box 673, "The Builder."

PLASTERING SUPERVISOR needs change. Life experience, 23 years present firm. Estimating and full control of labour. London's largest contracts. Highest possible references. Well up in all branches. For interview, Box 659 "The Builder."

FOREMAN DECORATOR TRADESMAN, Colourman. Experience in all trades. Will travel. Town, coast, country.—Mr. G. T. GAUNT, SNR., 14 Gloucester-way, London, E.C.1.

GENERAL FOREMAN seeks re-engagement with medium-size builder. Trade C.J., own Setting-out, use Dumpy, etc. At present free. London area or suburbs.—J. HALLIDAY, 18 Bygrove-street, Poplar, London, E.14.

GENERAL FOREMAN, C.J., 40, Conversions, Alterations, new, medium to large.—Box 741, "The Builder."

GENERAL FOREMAN/AGENT. C. & J. Age 55. Medium to large contracts. Life experience. Full control. Residing Harrow. Free now.—Box 476, "The Builder."

FOREMAN PAINTER desires change. Industrial, Decorative, Municipal Buildings, etc. Sound references, large staff controlled. Free one week from advertisement. Good results.—Box 781, "The Builder."

YOUNG MAN awaiting H.N.C. result, desires change from office to practical work on site in carpentry trade. Oxford area but willing to travel.—Box 776, "The Builder."

WAGES, P.A.Y.E., W.R.A., H.W.P., Labour Analysis, etc. Aged 58 years. Seeking change. Desired salary £12 10s. (Male.)—Box 751, "The Builder."

COMMERCIAL PILOT, age 33, fully licensed 3,700 hours' flying experience on twin and light multi-engine aircraft, currently employed with civil airline, seeks position as company pilot to group considering use of executive aircraft.—Box [illegible] "The Builder."

EDUCATIONAL

THE POLYTECHNIC
309 REGENT-STREET, W.1

SCHOOL OF ARCHITECTURE, SURVEYING AND TOWN PLANNING

Head of the School:
JOHN S. WALKDEN, F.R.I.B.A., M.T.P.I.

COURSES IN SURVEYING

DAY SCHOOL: The School of Surveying is recognised by the Royal Institution of Chartered Surveyors. The course is arranged to provide a thorough training for students intending to enter the professions of Building and Quantity Surveying, and prepares students for the First and the Intermediate Examinations of the Institution (Building and Quantity Surveying Sections).

Next School Year commences 26th September, 1960.
EVENING SCHOOL: Special evening courses of instruction for Valuation Quantity and Building Surveyors, and preparation for the examinations of the Royal Institution of Chartered Surveyors. Enrolment takes place on 21st September, 1960 (5 to 8 p.m.).

Session commences 26th September, 1960.
Prospectuses may be obtained from the Director of Education.

INTERIOR DESIGN AND DECORATION. Rhodec School offers a complete home study course in interior design and decoration. Course 1, for professional use. Course 2, for personal use about your home. Free hand-book by return post.—Write to Dept. B. RHODEC SCHOOL, BCM/Rhodec, London, W.C.1.

THE INSTITUTE OF QUANTITY SURVEYORS

EXAMINATIONS 1961

The Preliminary, Special Test, Intermediate, Final and Direct Membership Examinations of the Institute will be held on the 27th February to the 3rd March, 1961 (inclusive). Applications to sit for the Examinations, which must be made on the prescribed form to be obtained from the Secretary, must be received at the office of the Institute, 98 Gloucester Place, London, W.1, not later than the 31st OCTOBER, 1960.

The Rules and Syllabus of the various examinations may be obtained by application to the Secretary, price 5s. post free.

The Examinations are open to Quantity Surveyors, who may be in private practice either as principals or assistants, or in the service of a Government Department, public body, or public utility company, or the Quantity Surveying Department of a company, firm or person approved by the Council, carrying on business as a building or public works contractor.

I.Q.S. R.I.C.S. R.I.B.A. I.A.A.S.

Postal courses conducted in preparation for full syllabus or single subjects. Special arrangements made for students wishing to revise or supplement studies. Write to Principal, A. B. Waters, F.R.I.B.A., F.I.Arb.

THE ELLIS SCHOOL
103a, Old Brompton Road, London, S.W.7
Ask for DAS booklet. *and at Worcester*

R.I.B.A. & T.P.I. EXAMS

STUART STANLEY (Ex. Tutor School of Arch., Lon Univ.) & G. A. CROCKETT, M.A./B.A., F/A.R.I.B.A., M./A.M.T.P.I. prepare students by correspondence tuition. 10 Adelaide St., Strand, W.C.2. TEM. 1603/4

GOING UP! get there faster with . . . ICS

Turn your ambitions into reality—a better-paid job—with I.C.S. HOME STUDY. Quickly, easily, it gives you the knowledge you need—the specialised training that brings promotion and success. Fees are moderate and there are no books to buy.

Guaranteed coaching for professional Examinations:
Inst. of Builders — I.Q.S. Inter, Final and
Inst. Clerk of Works — Diploma in Working Up
R. Inst. Ch. Surveyors — Inst. Struct. Eng.
I.Mun.E. Bld. Insprs. Cert. — Inst. of Eng. Designer

First-class instruction coaching in:
Bldg. Contracting and Specifications, Architecture, Mun. Eng., Qty. Surveying, Civil Eng., Draughtsmanship, Struct. Eng., Sanitary Eng. and Courses in Management, Commerce, Mechanical, Radio and Electronic Engineering.

Post this coupon today

(Dept. 21J), Intertext House,
Parkgate Road, London, S.W.11

Subject .....
Name ..... *Age* .....
Address .....
.....
Occupation 8.60

INTERNATIONAL CORRESPONDENCE SCHOOLS

144-PAGE HANDBOOK

FREE!

TO AMBITIOUS BUILDING MEN

Every ambitious building man should read **"ENGINEERING OPPORTUNITIES."** This informative guide gives details of **A.M.I.C.E., A.R.I.B.A., F.R.I.C.S., L.I.O.B., M.R.S.H., A.I.Q.S.,** etc., and outlines the widest range of Home Study Courses in all branches of **Architecture, Building, Surveying, Heating and ventilating, Costing, Valuations, Timber Technology, etc.** Full details of our **"NO PASS—NO FEE"** terms are given in our handbook. Tell us what interests you and this useful book, which explains the easy way to increase your technical knowledge and personal prestige, will be sent FREE and without any obligation.

POST COUPON

(write if you prefer not to cut this page)

Please send me 144-page Handbook—FREE.

NAME_____

ADDRESS_____

SUBJECT OF INTEREST_____

BRITISH INSTITUTE OF ENGINEERING TECHNOLOGY
824, College House,
29-31, Wright's Lane,
Kensington, W.8

BIET

BUILDING TRADE COURSES

Postal courses in Building Construction, Science, Quantities, Estimating, Steelwork, Concrete, Surveying, Bookkeeping, etc., and for L.I.O.B., M.I.C.W., M.R.S.H., A.I.B.E., A. Blg. S.I., Building Inspector, City & Guilds, G.C.E., etc. Revision Courses also available. Send for booklet "Building Opportunities."

THE ELLIS SCHOOL,
2, ALBANY HOUSE, WORCESTER.
London Office:
103a, Old Brompton Road, London, S.W.7

BUSINESSES

VERY OLD-ESTABLISHED Building Concern East Kent, for Sale due to retirement of Directors. Excellent Yard with Offices, Joinery Works, etc. Going concern at £23,500 Freehold, inclusive stock and plant and also 26 fine building plots.—VERYARD & YATES, 2 High-street, Bromley, Kent. RAV 8731.

IRONMONGERS & BUILDERS' MERCHANTS' BUSINESS. Putney S.W.15. Double-fronted shop, excellent living accommodation. Turnover £12,500. Leasehold. Price £5,000 s.a.v.

IRONMONGERY & TOOLS BUSINESS, situated Plumstead, S.E.18. Double-fronted lock-up shop with excellent storage and showroom facilities. Leasehold. Turnover £12,000. Price £15,000 all at.

IRONMONGERY, HARDWARE & DOMESTIC STORES, Catford, S.E.6. Lock-up shop. Turnover £13,500. Price £4,500 s.a.v.—Further particulars of HENRY BUTCHER & CO., 73 Chancery-lane, W.C.2. Tel: HOLborn 8411.

FIRM of aggregate producers wish to contact person or persons interested in CONCRETE UNIT and READY MIX CONCRETE productions North Manchester area. Aggregate is high grade stone giving a compression test which can only be beaten by granite. Principals only.—Box 606, "The Builder."

OLD-ESTABLISHED BUILDERS' BUSINESS, with Leasehold premises in S.W. London for sale as a going concern. Turnover £50,000 per annum. Work in hand £10,000. Good connection could be developed under energetic direction.—Box 607, "The Builder."

BUILDERS AND PUBLIC WORKS CONTRACTORS' BUSINESS, South Worcs. area. Limited company. First-class trading. Average turnover approximately £145,000 p.a. last 4 years, increasing. Valuable freehold property comprising approximately ½ acre including workshops and offices, approximately 9,000 sq. ft. Large house. Modern plant and machinery. Staff approximately 110-120. Existing contracts commenced and in hand approximately £350,000.—Apply Box 734, "The Builder."

CENTRAL SUSSEX. Long-established and very productive BRICK WORKS for sale as a going concern. Modern buildings and equipment; service cottages; substantial output; in all about 25 acres of land including substantial clay reserves. For further particulars apply CLIFFORD DANN, Chartered Surveyor, Fitzroy House, Lewes (Tel.: 750).

SALES BY AUCTION

Without Reserve.

FREDERICK W. BALDWIN

has been instructed to sell by auction.

PLANT & MACHINERY, BUILDING MATERIALS, HAND TOOLS, ENGINEERS & ELECTRICAL STOCKS, and PLUMBERS' BRASSWARE, etc., etc.

Comprising

Scaffold tube and fittings, Calf Dozer, Fowler Dumper, Plumber's Brassware, New Baths, W.C. suites, Basins and Pedestals, Best Quality Paint, Paint and Distemper Brushes, Extension Ladders, Scales, Boiler Thermometers, Bolts, Nuts, Rivets, New Sink tops, Sets Masonry Drills, 100 yards Cream Wall Tiles, General trade stocks, New hand tools, Fibre Matting, 5 h.p. Electric Saw Bench, Morris 1000 Van in excellent condition, etc., etc., etc.

at Auction Rooms adjoining 'Harmers' Garage.

272 CHIPSTEAD VALLEY-ROAD, COULSDON, SURREY,

on

WEDNESDAY, AUGUST 24, 1960

at 11 o'clock prompt.

Viewing day prior and morning of sale. Catalogues from the Auctioneer, 270 Chipstead Valley-road, Coulsdon, Surrey. Telephone: Downland 2916.

HORSHAM, SUSSEX

on the northern outskirts of the town

ABOUT 20 ACRES of VALUABLE FREEHOLD BUILDING LAND

Occupying a delightful situation with views over Warnham Mill Pond, and including

MILLMEADS, PONDTAIL-ROAD,

containing

4 Reception Rooms, 6 Bedrooms, 3 Bathrooms, Domestic Offices and Range of Outbuildings.

Vacant Possession of the whole.

KING & CHASEMORE

have received instructions to offer the above for sale by auction (unless previously sold by private treaty) at

THE TOWN HALL, HORSHAM, WEDNESDAY, 7th SEPTEMBER, 1960,

at 3 p.m.

Solicitors: Messrs. H. A. Crowe & Co., 48 Chancery-lane, London, W.C.2.
Auctioneers: Messrs. King & Chasemore, Richmond House, Horsham. (Tel. Horsham 3355.)

SOUTHAM (Coventry and Rugby 12 miles, Leamington Spa 7 miles). Freehold Builders' Yard in prominent main road position suitable for storage depot, Warehouse, Petrol Filling Station, including most useful range of buildings and yard, self-contained modern Flat, site area 2,000 sq. yds. frontage 100 feet. For Sale by Auction on Wednesday, August 17, 1960, at 6 p.m. at The Craven Arms Hotel, Southam. Auctioneers: LOCKE & ENGLAND, 166 and 38 Parade, Leamington Spa. Tel: 2833 and 114.

A Sale of Builders plant and Equipment will be held at 86 Broomfield Road, Chelmsford, on Monday, 5th September, 1960, commencing at 11 a.m. The items will include mechanical Digger, Concrete mixers, Welding sets, electric Motors and pumps, a large quantity of scaffolding, various tools and equipment.

Catalogues will be available in due course from the Auctioneers, **Strutt & Parker, Lofts & Warner, Coval Hall, Chelmsford, Essex. Telephone 4681/3.**

LAND, PREMISES, ETC.

PECKHAM. Builders' Yard. User Rights or Storage. 5,000 sq. ft. including 2,000 sq. ft. Covered, plus modern Offices and all conveniences. Long lease. £550 per annum, or sell.—IMPERIAL, 818 Hamilton Lodge, Oldfield-road, Bickley, Kent.

FURNISHED OFFICES, London, W.1. Architect offers share of West End office suite, fully furnished, to Architect, Surveyor or Quantity Surveyor. All services available. Terms by arrangement.—Box 513, "The Builder."

MUCK SHOOTS in Mill Hill and Southgate, London.—For details 'phone Bowes Park 2402.

BUILDERS and Contractors Require YARD, STORES and WORKSHOP in South London up to 10,000 sq. ft.—Box 978, "The Builder."

SITEFINDERS LIMITED
specialise exclusively in building land
SITEFINDERS LTD., Land Agents,
16, Berkeley Street, Mayfair, London, W.1.
Tel. MAYfair 5784

E R

By order of the Minister of Works

Messrs. FULLER HORSEY SONS & CASSELL

have been instructed to offer for Sale by Auction in Lots at the

SPADEADAM RESEARCH ESTABLISHMENT, Nr. GILSLAND, CUMBERLAND,

on

TUESDAY, 30th AUGUST, 1960,

at 11 a.m. precisely

CONTRACTORS' PLANT AND EQUIPMENT, GARAGE PLANT, ENGINEERS' and MISCELLANEOUS STORES

including 2 Blaw Knox 12 S Diesel MIXERS fitted DRAGLINE EQUIPMENT; 2 Benford 5/3½ cu. yd. Diesel CONCRETE MIXERS; Blaw Knox Mobile Diesel CONCRETE PUMP with 6 in. metal delivery pipes; 2 Road Machinery Double Bucket Swing WEIGHBATCHERS; Acrow 1 cu. yd. RECEIVING HOPPER; Line Cumflow Diesel MIXER; Diesel HOIST; 2 C.P.T. Diesel Electric ROTARY AIR COMPRESSORS; C.P.T. 160 cu. ft. Diesel Compressor; Sinker Drills; Clay Diggers; Concrete Breakers; 3 Mobile Trailer Mounted Morrison 3 kW. 110 volt LIGHTING SETS; 18 Diesel and Petrol Pumps 4 to 1½ in; 125,000 ft. STEEL and ALLOY SCAFFOLD TUBES; SCAFFOLD FITTINGS; ACROW PROPS, STRUTS, CROSS BARS and VERTICALS; 75,000 ft. SCAFFOLD BOARDS; Road Forms, Trench Sheets, Steel Shuttering, Safe Tread Panels, Floor Centres and Cramps; 150 TONS STEEL REINFORCING RODS and BARS; Cast Iron Steel and Asbestos Piping and Fittings, Glazed and Stoneware Pipes, Concrete Slabs, Blocks, Kerbs and Posts, Manholes and Frames, Land Drains, HUTS AND HUT SECTIONS, Somerfield Track, Tie Rods; CORRUGATED GALVANISED SHEETS; WEAVER 7½ TONS VEHICLE LIFT; 60-TON PRESS; INGERSOLL COMPRESSOR; STARTALL MAJOR; MUREX WELDER; NEWTON BORING BAR; VALVE REFACER; BATTERY CHARGER; TROLLEY JACKS; PORTABLE GREASERS; MANN EGERTON GANTRY; Electric Grinders, Portable Electric Drills, Kango Hammers, Masons' Drills, Bar Benders and Croppers, Hand Tools, Ropes, Cramps, Rain Water Fittings, Ironmongery, Door Furniture, Fencing and Wire Netting, Plastic Sheets, Tarpaulins, Paints, Oils, Greases, Hard Woods, Doors, Windows and Frames, Ladders, Tilley Lamps and Spares, Bolts, Nuts, Nails, Wood Screws, Sinks, Basins, Cabling and Electrical Fittings; BRASS and ALUMINIUM ANGLES; 150 TONS PREFABRICATED STEEL; Protective Clothing; LABORATORY EQUIPMENT; OPTICAL INSTRUMENTS; Store Racks, SPARES for Bedford, Land Rover and A.E.C. Vehicles and SPARES for Ruston Excavators, Tractors, Compressors, Cranes, Engines, Johnston Dumpers, Drills, Vibrators, etc.; HOSTEL FURNITURE and EQUIPMENT and numerous other effects.

Catalogues, 1s. each, may be obtained, when ready, from Messrs. FULLER HORSEY SONS & CASSELL, Industrial Auctioneers, 10 Lloyds-avenue, London, E.C.3.

EFFINGHAM. 1,050 FT. FRONTAGE with depth of 200 ft. facing and directly adjoining existing development. Main sewer, water and electricity. By auction Without Reserve on 29th August.—Auctioneers: C. BRIDGER & SONS, Ashtead 3418.

PATENTS & TRADEMARKS

"SWAN FLOORING" is the Registered Trade-mark of Fine Hardwood and Softwood Flooring.—Manufactured in this country by J. H. & F. W. GREEN, Ltd., Charlton Sawmills, Singleton, Chichester, who will gladly send stock lists and price lists on request.

THE TRADE MARKS set out below were assigned on the 11th May, 1960, by JAMES HUSTLER & SON Ltd., of White Lund, Morecambe, Lancashire, to J. GERRARD & SONS Ltd., of Pendlebury-road, Swinton, Manchester, WITHOUT THE GOODWILL OF THE BUSINESS IN WHICH THEY WERE THEN IN USE.

Registration Number	Mark	Goods
775987	UNITAS	Installations for ventilating, and parts and fittings therefor included in Class 11.
775988	UNITAS	Doors, windows, and window frames, none being wholly or principally of metal, and parts and fittings for all these goods included in Class 19.

Call at

THE BUILDER BOOKSHOP

THE BUILDER LIMITED, The Builder House,

Catherine Street, Aldwych, London, W.C.2

Telephone: TEMPLE Bar 6251 (Extension 5)

FRANK BATTY & SMITH LTD

BUILDING & CIVIL ENGINEERING CONTRACTORS

LONDON, W.2. PAD 5148, 3088-9 | SOUTH WALES. CARDIFF 22361/2 | ISLE OF WIGHT. RYDE 3322/3.

A selection of titles from our comprehensive stock of books for the architectural profession, building and allied trades.

THE BOOK SHOP

The Builder House, Catherine Street, Aldwych, W.C.2. Monday to Friday, 9 a.m. to 5 p.m. Temple Bar 6251

BRICKWORK & MASONRY

Teach Yourself Brickwork *E. L. Braley*	6 0
Practical Bricklaying *A. Hammond*	6 6
Brickwork *F. Walker, revised by J. P. Allen*	4 0
Brickwork *E. G. Dorman & E. J. Elmes*	10 6
Constructional Masonry *E. G. Warland*	10 0
Modern Practical Masonry *E. G. Warland, M.I.Strut.E.*	2 10 0
Hutchins' Priced Schedules. No. 2, Bricklayer	15 0
Brickwork *E. Lindsay Braley*	2 5 0
Brickwork for Apprentices *J. C. Hodge*	15 0
Bricks & Modern Research *B. Butterworth*	10 6

GENERAL CONSTRUCTION

Analysis of Multi Storey Frames *G. Kani*	2 0 0
Analysis of Structures *Smolira*	18 0
Fabricating Houses from Component Parts *Norman Cherner*	3 4 0
Plastic Methods of Structural Analysis *B. G. Neal*	2 5 0
Building Construction *W. B. McKay (Complete Edition)* Vol. I, 16-0; Vol. II, 16-0; Vol. III, 16-0	2 10 0
Building Construction Illustrated *Denzil Nield, A.R.I.B.A.*	1 1 0
Building Construction for National Certificate *E. G. Warland Vol. I, 8/6; Vols. II & III, each*	9 6
Elementary Building Construction *G. A. Mitchell*	18 0
Building Construction *J. C. Bowden & E. G. Bartle* Book I, 6/6; Book II, 6/-	
Builders' Materials *B. H. Knight & Rena G. Knight*	1 10 0
Building Materials *C. C. Handisyde*	1 10 0
Teach Yourself Constructional Details *D. E. Warland*	6 0
Fire in Buildings *E. L. Bird & S. J. Docking*	18 0
Examples in Elementary Engineering *D. Portway*	8 6
House Repairs (Teach Yourself) *M. Stuart*	6 0
Strength of Materials *G. H. Ryder*	1 2 6
Plastics in Building *J. B. Singer*	18 0
Public Health Engineering *P. C. G. Isaac*	1 16 0
Walls & Wall Facing *Denzil Nield*	9 0
Structure in Building *W. Fisher Cassie & J. H. Napper*	1 10 0
Hutchins' Priced Schedules, No. 7, Sundries	10 0
Hutchins' Priced Schedules, No. 8, Comprehensive Repairs	1 0 0
Hutchins' Priced Schedules, No. 9, Public Works	1 0 0
Strength of Materials *E. S. Andrews*	2 0 0
Further Problems in the Theory & Design of Structures *E. S. Andrews*	1 1 0
Design of Shell *Albin Chronowicz*	2 2 0
Home Workshop *W. R. Wellman*	1 14 0
Model Analysis of Structures *T. M. Charlton*	1 1 0
Solutions of Problems in Structures *W. T. Marshall*	1 7 6
Sports Buildings & Playing Fields *Sudell and Waters*	3 3 0
Semi-Fireproof Construction *H. R. Staley*	2 8 6
Design of Structural Members *H. T. Jackson*	1 5 0
Advanced Building construction *G. A. Mitchell*	1 1 0
Industrial Cooling Tower *K. K. McKelvey & M. Brooke*	4 10 0
Construction of Building *R. Barry* Vol. I	18 0
Vol. II	1 0 0
Moving the Earth *H. L. Nichols, Jr.*	6 15 0
How to Operate Excavation Equipment *H. L. Nichols*	1 6 6
Dwelling House Construction *A. G. H. Dietz*	2 8 6

GLASS & GLAZING

Glass & Glass Manufacture *P. Marson*	8 6
Windows & Window Glazing *E. Molloy*	7 6

ROOFS & ROOFING

Roofing & Stairbuilding with the Steel Square *Angus McEwan*	10 6
A.B.C. of Roofing *J. E. Cotgrove*	4 6
Slating & Tiling *J. Millar*	5 0
Teach Yourself Roofing *J. Lee*	6 0
Roofing Ready Reckoner *Ralph Goss*	6 0
Roofing Tables *W. T. Harris*	3 6

POSTAGE 9d. ON ALL BOOKS VALUE 5/- · 1/6d. ON 10/- AND ABOVE

B.K.2

A FULL RANGE OF MODERN

Woodworking Machinery

ESPECIALLY SUITABLE FOR CUTTING PLASTIC FACED MATERIALS AND CHIPBOARD SHEETS

for

ALSO IDEAL FOR

JOINERY

DANCKAERTS

Woodworking Machinery Ltd.

HEAD OFFICE AND SHOWROOMS. 2, 4 and 6, EAST ROAD, CITY ROAD, LONDON, N.1

Telephone: CLE 7155 (3 lines) Telegrams: Machinaboi, Nordo, London

Please mark page number(s) clearly and add your name, address and profession to ensure that your request can be forwarded without delay to the advertiser(s).

BLOCK LETTERS PLEASE

Readers' Service Form

Reader's Name .....

Address .....

.....

Profession or Trade .....

TECHNICAL REVIEW PAGE—201. Place a tick against the number of the paragraph which interests you 1 2 3 4 5 6

CUT

A.B.C.D. (Raynes Park), Ld. 91
Abelson & Co. (Engs.), Ld. 110
Ableson, L. & D., Ld. 52
Acworth Plant Hire 114
Airscrew Co. & Jicwood, Ld. 29
Allen, J., & Sons (Oxford), Ld. 14
Allerton Studios 129
Allied Guilds 96
Allied Rubber Prods. & Engineering Co., Ld. 111
Anderson, D., & Son, Ld. 18
Arted & Co., Ld. 111
Ascot Gas Water Heaters Co. 86
Ashwell & Nesbit, Ld. 104

Batley, E., Ld. 109
Batsford, B. T. *307*
Batty, F., & Smith, Ld. 132
Beeston, J., & Co., Ld. 95
B.I.E.T. 131
Bilston Foundries, Ld. 81
Boddy Roofing Co., Ld. *306*
Booth, J., & Sons (Bolton), Ld. 12
Boydell, E., & Co., Ld. 6
Boyle, R., & Son 101
British Bitumen Emulsions, Ld. 95-100-101
British Cellophane, Ld. 71
Broad & Co. *308*
Broads Manufacturing Co., Ld. 95
Broom & Wade, Ld. 20
Bryce White & Co., Ld. 77
Builders' Est. Serv., Ld. 129
Burn Bros. (London), Ld. 47

Contracts 83
C. & M. Engineering Co., Ld. 102
C. & S. Construction Co., Ld. 100
Campbell-Gray, Ld. 113
Campbell-Horne & Co., Ld. 98
Canal Joinery & Moulding Co., Ld. 97
Cape Asbestos Co., Ld. 82
Caswell Cranes & Erection, Ld. 114
Cattle, R., Ld. 48
Cayless Bros. 110
Cement Marketing Co., Ld. 4
Chamberlain Plant, Ld. 106
Chaseside Eng. Co., Ld. 112
Chimneys, Ld. 95
City Calculations, Ld. 129
City Veneering Mills, Ld. 107
Clifton, I., & Sons, Ld. 110
Cloke, Geo., Ld. 95
Colt Ventilation, Ld. 33
Concrete, Ld. 76
Conder Eng. Co., Ld. 21
Contractors' Services, Ld. 113
Cook, A. V., & Co., Ld. 99
Cox & Danks, Ld. 8
Cox, H., & Sons, Ld. 114
Cox, P., & Partners, Ld. 100
Cox, W. J. (Sales), Ld. 49

Damp-proofing, Ld. 100
Danckaerts Woodworking Mach., Ld. 132
Dandridge's 112
Darlington Fencing Co., Ld. 96
Davis, P. 111
Delta (Plant), Ld. 16-106
Denton Edwards Paints, Ld. 45
Doe, E., & Sons, Ld. 112-113
Dunlop Footwear, Ld. 63
Dussek Bros. & Co., Ld. 8

Econa Modern Products, Ld. 52
Edwards, F. J., Ld. 112
Elgood, E. J., Ld. 97
Ellard Sliding Door Gears, Ld. 78
Ellis School of Building 130-131
Essex Steel Scaffolding Co., Ld. *308*
Evode, Ld. 2-3
Excel Asphalte Co., Ld. 95
Expandite, Ld. 95-96-100-111

Falkus Bros., Ld. 62
Farr, E., Ld. 101
Farrar, E., Ld. 98
FEB (Great Britain), Ld. 7-9
Federation of Master Builders *308*
Fitton, S. & J. (Tarpaulins), Ld. 101
Fixings Co., Ld. 115
Fluid Glass Prods., Ld. 96

General Electric Co., Ld. 17
Gestetner, Ld. 65
Greenham Group, Ld. 75
Greenwich Pump & Plant Co., Ld. 113-114
Gyproc Products, Ld. 105

Hammond & Champness, Ld. *Inside Back Cover*
Haywards, Ld. 27
Higgs & Hill, Ld. 37
Hill, H. C., Ld. 113
Hills, F., & Sons, Ld. 64
Holland & Hannen 112
Hough Bros., Ld. 97
Housden, G. & H. 115
Hubbuck, T., & Son, Ld. 55
Hy-Rib Div., Truscon, Ld. 99

ICI, Ld. 30-31
ICS 130
Institute of QS 130
International Harvester Co. of G. B., Ld. 32
Ironite Co., Ld. 97
Isocrete Co., Ld. 46

Jablo Plastics Industries, Ld. 77
James Joinery 115
Janes, H. C., Ld. 55
Jerrard, Sons & Co., Ld. 10
Johnson, C. H. (Mach.), Co., Ld. 28

Keay, E. C. & J., Ld. 46
Kelseal, Ld. 99
Kenyon, W., & Sons (MetaMica), Ld. 82
Kerner-Greenwood & Co. 58
Kiné Engineering Co., Ld. 57
King, Geo. W., Ld. 31
King, J. A., & Co., Ld. 80
Kings Langley Engineering Co., Ld. 107
Kirkstone Green Slate Quarries, Ld. *30*
Kitson's Insulations, Ld. 9
Kittridge Flg., Ld. 11

Lafarge Aluminous Cement Co., Ld. 25-61
Lakeland Green Slate & Stone Co., Ld. 40
Lead Development Association 108
Legge, J., & Co., Ld. 40
Leggott, W. & R., Ld. 11
Leisure Kitchen Equipment, Ld. 19
Lever, J., & Sons, Ld. 110
Lewis & Lewis, Ld. 55
Lillington, G., & Co., Ld. 13-102
Lilly, W., & Co., Ld. 48
Liner Con. Mach. Co., Ld. 23-90-94
Liquitile Supply Co., Ld. 43
Lister, R. A., & Co., Ld. 34
Lockwood, R. W. 115
London & Midland Steel Scaffolding Co., Ld. 15
London Ass. of Builders' Foremen & C. of W. 116
London Brick Co., Ld. 36
London Crystal 97
London Flooring Co. 97
Luxfer, Ld. 98
Lytag, Ld. 68

Macandrews & Forbes, Ld. 50
Macnamara, J., & Co., Ld. 111-112-113-114
Mander & Germain, Ld. 98
Marley Concrete, Ld. 111
Marley Tile Co., Ld. 67-85
Martyn, Bruce, Ld. 97
Mather & Platt, Ld. 44
Maxwell, A., Division 108
McLellan Rawson & Co., Ld. 100
Metropolitan Concrete Works, Ld. 80
Metway 94
Midland Wood Working Co., Ld. 73
Mills Scaffold Co., Ld. *Back Cover*
Mint, Birmingham, Ld., The 57
Modern Tile & Floor Co., Ld. 97
Moore's Plant, Ld. 113-114
M.S.J. Fencing Contractors 96
Mullen & Lumsden, Ld. 60

National Coal Board 54
New Stone & Restoration, Ld. 100
Newtonite, Ld. 47
Nicoll, Dawson & Humphries, Ld. 95-99-114
Noelite, Ld. 8
Northarc Organisation 100

Oldacres & Co., Ld. 115
Olsson, M. (Fibreboards) Ld. 26-39
Orlit, Ld. 98

Palmers Trav. Cradle & Scaff. Co., Ld. 95-99-102
Paramount Asphalte, Ld. 95
Parkes, J., & Sons, Ld. 51
Parkinson, E. (London), Ld. 99
Peel, H., Ld. 54
Perkins, J. M., & Smith, Ld. 49
Permanite, Ld. 95-96-99
Phillips, J. W. & C. J., Ld. 56
Pilkington Bros., Ld. 66
Podmore Works, Ld. 110-111
Potter, F. W., & Soar, Ld. 106
Potter Rax, Ld. *Cover*
Prestwich, W., & Sons, Ld. 77
Pugh Bros., Ld. 59

Raylor, J. W., & Co. (Engs.), Ld. 94
Record Tower Cranes 50-104
Rekab Instruments, Ld. 94
Richardson, P. C., & Co. (M'brough), Ld. 95
Royde & Tucker, Ld. 98

Salter, Edwards & Co., Ld. 95
Saygus Scaffolders, Ld. 96
Shaftesbury Ladders, Ld. 56
Shapland & Petter, Ld. 97
Shell Chemical Co., Ld. 38
Shutter Contractors, Ld. 50
Simpson, A. F., Ld. 111
Sitefinders, Ld. 131
Site Survey Co. 129
Skinner, W. A., & Co., Ld. 96
Sloggetts (Plant Hire) 114
Smith, H. V., & Co., Ld. 95
Smith, J., & Co. (London), Ld. 104
Sommerfelds, Ld. 89
Stephens & Carter, Ld. 95-98-99-114
Sterdy Telephones, Ld. 78
Steventon, J., & Sons, Ld. 56
Stramit Boards, Ld. 11
Sugg, Wm., & Co., Ld. 103
Swinnerton, S. & J. H., Ld. 63
Symes (Plant), Ld. 113
Synthite Ld. 107
Szerelmey 100

Tantivy Tiles, Ld. 115
Thermalite, Ld. 35
Thornton, W., & Sons, Ld. 97
Timber Development Ass. 74
Tile Floors (Ind.), Ld. 52
Tomo Trading Co., Ld. 101
Travis & Arnold, Ld. 53
Tretol, Ld. 5
Tunnel Portland Cement 41
Turner, R. M., & Hunters, Ld. 54

Valor Co., Ld. 69
Vardale Fencing Co., Ld. 96
Vigers Bros., Ld. 109

Walley, T. E., Ld. *304*
Walpamur Co., Ld. 79
Wanson Co., Ld. 113
Ward, Thos. W., Ld. 72
Weil, J., & Son, Ld. 22
Williamson & Kay, Ld. 42
Wickham Eng. Co., Ld. 24
Wright, W. S., Ld. 112
Wyckham Blackwell, Ld. 110

Yale & Towne Mfg. Co. 70
Youngs of Orpington, Ld. 96

Zeta Wood Flooring Co. (1910), Ld. 102

Advertisers' Index

TUCK IN

The Builder Readers' Service Form

FIRST FOLD

LAST FOLD

If you would like more information regarding any of the products mentioned in this issue please tick index, detach the whole of this page, fold and post as indicated.

Postage will be paid by The Builder Ltd.

No Postage Stamp necessary if posted in Great Britain or Northern Ireland

BUSINESS REPLY SERVICE
Licence No. WC1799

THE BUILDER LIMITED,
READERS' ENQUIRY SERVICE,
4, CATHERINE STREET,
LONDON, W.C.2

SECOND FOLD

FIRST FOLD

Messrs Guest Keen & Nettlefolds Ltd.
66 Cannon Street, London, E.C.4
Architects: F. Boreham, Son & Wallace

H & C

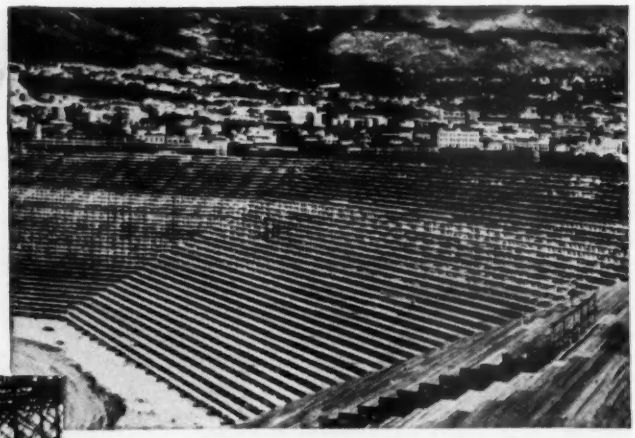
ELECTRIC PASSENGER & GOODS

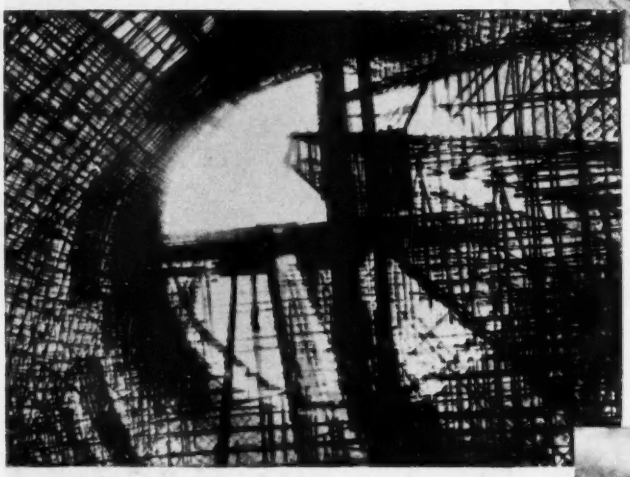
LIFTS

H&C LIFTS

HAMMOND & CHAMPNESS LTD.
Gnome House, Blackhorse Lane
Walthamstow, London, E.17
Telephone: LARkswood 1071

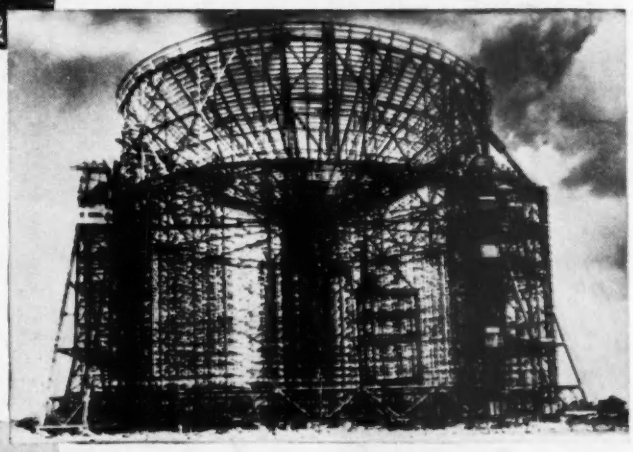
There's no limit

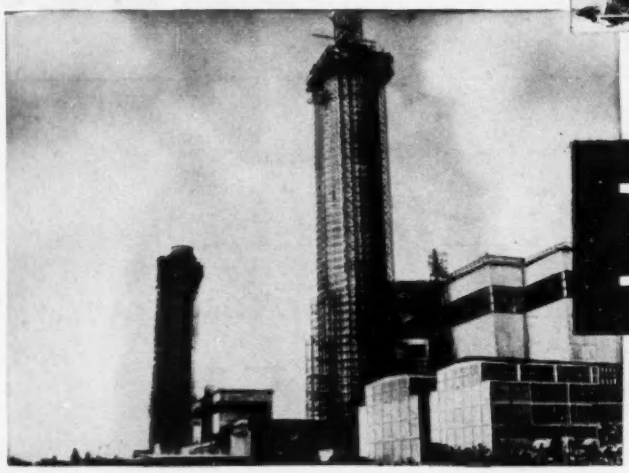




to the support

you can get from





MILLS

MILLS SCAFFOLD CO. LTD., *A subsidiary of Guest, Keen & Nettlefolds, Ltd.*, Head Office: Trussley Works, Hammersmith Grove, London W.6. (RIVerside 3011)

Published by THE BUILDER LIMITED, at the Builder House, Catherine-st., Aldwych, London, W.C.2, England.
Printed by ST. CLEMENTS PRESS LTD., 112, Queen Victoria-st., E.C.4. August 12, 1960. REGISTERED AT THE GENERAL POST OFFICE AS A NEWSPAPER.